

h eb c g cg b cg eb

L1 1626 WATER AND SURFACTANT AND GLYCERIDE

=> s l1 and (fuel or coal)

L2 24 L1 AND (FUEL OR COAL)

=> d l2 1-24 all

L2 ANSWER 1 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 2003-570424 [54] WPIDS

DNN N2003-453406 DNC C2003-154238

TI Production of graft copolymers, comprises radical polymerization of a monomer onto a polymer in a liquid phase comprising a liquid diluent and a phase mediator.

DC A13 A85 L03 X16

IN HUSLAGE, J; RAGER, T

PA (OPEL) OPEL AG ADAM

CYC 1

PI DE 10108598 A1 20020905 (200354)\* 10p C08F002-00

ADT DE 10108598 A1 DE 2001-10108598 20010222

PRAI DE 2001-10108598 20010222

IC ICM C08F002-00

ICS C08F291-00

AB DE 10108598 A UPAB: 20030821

NOVELTY - Production of graft copolymers by radical polymerization of monomer onto a polymer in a liquid phase comprising a liquid diluent, comprises polymerization in the presence of substance that acts as phase mediator between diluent and monomer, provided that mixture of diluent and phase mediator does not dissolve or swell the graft copolymer product. The polymer is insoluble in the liquid phase and the monomer is insoluble in the diluent.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for producing an ion-exchange membrane, comprising introducing ionic groups into a graft copolymer produced as above.

USE - The graft copolymers (claimed) are useful for producing ion-exchange membranes (claimed) for use as polymer electrolytes in fuel cells.

ADVANTAGE - The degree of grafting can be controlled by varying the amount of phase mediator used.

Dwg.0/2

FS CPI EPI

FA AB

MC CPI: A10-C03B; A12-E06B; A12-M03; L03-E04A2

EPI: X16-C01C; X16-F02; X16-J01A

L2 ANSWER 2 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 2001-138049 [14] WPIDS

DNC C2001-040596

TI Cleansing composition useful in personal care products particularly make-up remover comprises a liquid silicone, an ester and a water dispersible component.

DC A96 D21 E19

IN KAMINSKI, C; LUKENBACH, E R; PASCAL-SUISSE, S; RUGGIERO, M; TAHAR, M

PA (JOH) JOHNSON & JOHNSON CONSUMER CO INC; (KAMI-I) KAMINSKI C; (LUKE-I)

LUKENBACH E R; (PASC-I) PASCAL-SUISSE S; (RUGG-I) RUGGIERO M; (TAHA-I)

TAHAR M

CYC 95

PI WO 2001001949 A1 20010111 (200114)\* EN 70p A61K007-48

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM

h ebc g cg b cg

eb

DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC  
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE  
 SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
 AU 2000057648 A 20010122 (200125) A61K007-48  
 US 2002035046 A1 20020321 (200224) A61K007-75  
 EP 1216685 A2 20020626 (200249) # EN A61K007-00  
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
 RO SE SI TR  
 AU 2001097359 A 20020627 (200254) # A61K009-107  
 CA 2365818 A1 20020621 (200254) # EN A61K031-222  
 CN 1366874 A 20020904 (200281) # A61K007-043  
 JP 2002322045 A 20021108 (200305) # 77p A61K007-48  
 KR 2002060054 A 20020716 (200305) # A61K007-00  
 ADT WO 2001001949 A1 WO 2000-US17431 20000623; AU 2000057648 A AU 2000-57648  
 20000623; US 2002035046 A1 Provisional US 1999-141927P 19990701, CIP of US  
 2000-604563 20000627, US 2000-745270 20001221; EP 1216685 A2 EP  
 2001-310796 20011221; AU 2001097359 A AU 2001-97359 20011221; CA 2365818  
 A1 CA 2001-2365818 20011221; CN 1366874 A CN 2001-125342 20011221; JP  
 2002322045 A JP 2001-402978 20011221; KR 2002060054 A KR 2001-82797  
 20011221  
 FDT AU 2000057648 A Based on WO 2001001949  
 PRAI US 1999-141927P 19990701; EP 2001-310796 20011221; AU 2001-97359  
 20011221; CA 2001-2365818 20011221; CN 2001-125342 20011221; JP  
 2001-402978 20011221; KR 2001-82797 20011221  
 IC ICM A61K007-00; A61K007-043; A61K007-48; A61K007-75; A61K009-107;  
 A61K031-222  
 ICS A61K007-02; A61K007-04; A61K007-06; A61K007-075; A61K007-08;  
 A61K007-50; A61K031-07; A61K031-19; A61K031-21; A61K031-225;  
 A61K031-23; A61K031-235; A61K031-25; A61K031-355; A61K031-496;  
 A61K031-506; A61K031-569; A61K031-60; A61K038-48; A61P017-00;  
 A61P017-06; A61P017-08; A61P017-10; A61P017-14; A61P017-16;  
 A61P039-00; A61P043-00  
 AB WO 200101949 A UPAB: 20011220  
 NOVELTY - A cleansing composition which is stable, economically-feasible  
 and can effectively remove the residue from sebum as well as the residue  
 from make-up and hair protecting agents, but also impart a non-oily feel.  
 DETAILED DESCRIPTION - A cleansing (C1) comprises a liquid silicone  
 (a), a water dispersible component (b) and an ester (c).  
 INDEPENDENT CLAIMS are included for:  
 (A) a cleansing system (S1) comprising (C1), water, a polymeric  
 emulsifier (d) and/or a thickener (e);  
 (B) treating hair loss, inhibiting hair growth, treating acne,  
 reducing the signs of aging and other manifestations of photodamage,  
 depigmenting the skin, treating the symptoms and/or the diseases of  
 dandruff, seborrheic dermatitis and/or psoriasis involves topically  
 applying a mixture of (S1) and a hair loss treatment agent (f), hair  
 growth inhibiting agent (g), anti-acne agent (h), anti-aging agent (i),  
 depigmentation benefit agent (j) or a benefit agent (k) respectively to  
 the desired location of an animal or human;  
 (C) a foaming composition comprising (b), (c), water and a foaming  
 surfactant (l);  
 (D) making an oil-in water emulsion which involves (i) combining a  
 lipophilic phase with a hydrophilic phase; and (ii) neutralizing a  
 hydrophilic thickening agent (m) in the hydrophilic phase with a  
 neutralizer. The hydrophilic phase comprises a polymeric emulsifier;  
 (E) making a water-in oil emulsion which involves (ii) followed by  
 (i); and  
 (F) depositing a benefit agent into and/or onto the skin, hair and/or  
 nails involves applying a composition comprising: either an optional (a),  
 (b), (c), (d) and/or (f), and a benefit agent (n); or (a), (b), (c),  
 water, (l) and (n).  
 USE - In personal care products (particularly make-up remover)  
 (claimed).  
 ADVANTAGE - The cleansing compositions not only impart superior

cleansing properties, but also are relatively non-irritating and thus suitable for use by people having sensitive skin and eyes. The compositions effectively deliver and/or deposit different benefit agents into and onto the skin.

Dwg.0/5

FS CPI

FA AB; DCN

MC CPI: A06-A00E3; A12-V04A; A12-V04C; D08-B01; D08-B03; E05-E; E05-E01; E05-E02; E10-E04G; E10-E04K; E10-G02F1; E10-G02F2; E10-G02G2; E10-G02H2

L2 ANSWER 3 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 2001-024575 [03] WPIDS

DNC C2001-007377

TI **Fuel** composition for use in internal combustion engine comprises hydrocarbon **fuel**, polar fluid and an emulsifier comprising non-cyclic polyol fatty acid esters and non-cyclic polyol fatty alcohol ethers.

DC E17 H06

IN KLAUSMEIER, W H

PA (PURE-N) PURE FUELS USA INC

CYC 91

PI WO 2000063322 A1 WO 20001026 (200103)\* EN 69p C10L001-02

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL  
OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ  
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI  
SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000048008 A 20001102 (200107) C10L001-02

ADT WO 2000063322 A1 WO 2000-US10862 20000421; AU 2000048008 A AU 2000-48008 20000421

FDT AU 2000048008 A Based on WO 2000063322

PRAI US 1999-130534P 19990421

IC ICM C10L001-02

AB WO 200063322 A UPAB: 20010116

NOVELTY - **Fuel** composition comprises a hydrocarbon **fuel**, a polar fluid and an emulsifier capable of forming emulsion. The emulsifier essentially comprises non-cyclic polyol fatty acid esters and non-cyclic polyol fatty alcohol ethers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) Method of formulating a hydrocarbon **fuel** by adding a polar fluid and an emulsifier to the **fuel**.

(2) Synthesis of polyol fatty acid ester by protecting all except preselected reactive alcohol groups of polyol having at least three reactive alcohol groups, by reacting with single protecting group capable of protecting one or more reactive alcohol groups. A fatty acid is linked to the polyol through an ester linkage by reacting the fatty acid with the preselected reactive alcohol groups. The protecting groups are removed and polyol fatty acid ester is formed. The entire process is carried out under conditions that would not reduce the unsaturated fatty acid.

(3) Method of separating polyol monoesters particularly mono **glycerides** from a mixture of polyol monoesters (mono **glycerides**) and polyol multiester particularly multiglycerides, with the polyol containing at least four carbon chains. The method involves contacting an extraction fluid having a non-polar component and polar component with the mixture and preferentially associating the polyol monoester with the polar component and the polyol multi-ester with the non-polar component. The polyol monoester is at least partially separated from the polyol multiester by separating the polar component from the non-polar component.

USE - **Fuel** for internal combustion engine (claimed) and for heat, electricity and propulsion purposes.

ADVANTAGE - The **fuel** components are present in amount effective to reduce emission of nitrogen oxides and particulates by a threshold amount upon combustion of diesel composition, compared with diesel **fuel** alone. The constituents of the **fuel** composition are obtained from renewable resources so that the cost is reduced. The composition has excellent thermal stability.

Dwg.0/6

FS CPI

FA AB; DCN

MC CPI: E10-E04G; E10-E04J; E10-E04K; E10-E04L; E10-E04M3; H06-B

L2 ANSWER 4 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 1992-416130 [51] WPIDS

TI Prepn. of fatty acid ester(s) of short chain alcohol(s) - by several stage re-esterification of fatty acid **glyceride**(s) with mono hydric alcohol(s) or mono alkylated diol(s) using basic catalysts.

DC B05 D13 D21 D23 E17 H06 H07

IN WIMMER, T

PA (WIMM-I) WIMMER T

CYC 40

PI AT 9102200 A 19921115 (199251)\* C11C003-10

WO 9309212 A1 19930513 (199320)B 17p C11C003-04

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA SE

W: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW

NL NO PL RO RU SD SE UA US

AU 9228809 A 19930607 (199338) C11C003-04

AT 397510 B 19940315 (199413)

HU 66403 T 19941128 (199502) C11C003-04

CZ 9401116 A3 19950215 (199514) C11C003-04

EP 658183 A1 19950621 (199529) DE C11C003-04

R: AT BE CH DE DK ES FR IT LI SE

US 5434279 A 19950718 (199534) 5p

EP 658183 B1 19970312 (199715) DE 7p C11C003-04

R: AT BE CH DE DK ES FR IT LI SE

DE 59208211 G 19970417 (199721) C11C003-04

HU 212123 B 19960228 (199740) C11C003-04

ADT AT 9102200 A AT 1991-2200 19911106; WO 9309212 A1 WO 1992-AT136 19921103; AU 9228809 A AU 1992-28809 19921103; AT 397510 B AT 1991-2200 19911106; HU 66403 T WO 1992-AT136 19921103; HU 1994-1330 19921103; CZ 9401116 A3 CZ 1994-1116 19921103; EP 658183 A1 EP 1992-922141 19921103; WO 1992-AT136 19921103; US 5434279 A WO 1992-AT136 19921103; US 1994-232285 19940506; EP 658183 B1 EP 1992-922141 19921103; WO 1992-AT136 19921103; DE 59208211 G DE 1992-508211 19921103; EP 1992-922141 19921103; WO 1992-AT136 19921103; HU 212123 B WO 1992-AT136 19921103; HU 1994-1330 19921103

FDT AU 9228809 A Based on WO 9309212; AT 397510 B Previous Publ. AT 9102200; HU 66403 T Based on WO 9309212; EP 658183 A1 Based on WO 9309212; US 5434279 A Based on WO 9309212; EP 658183 B1 Based on WO 9309212; DE 59208211 G Based on EP 658183, Based on WO 9309212; HU 212123 B Previous Publ. HU 66403, Based on WO 9309212

PRAI AT 1991-2200 19911106

REP 2.Jnl.Ref; AT 394571; BR 8300429; DE 3707563; EP 127104; EP 131991; WO 9115452

IC ICM C11C003-04; C11C003-10

FS CPI

FA AB

MC CPI: B10-G02; D10-B02; E10-G02C; E10-G02E; H06-B; H06-B04; H07-A; H08-D05

L2 ANSWER 5 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 1991-288385 [40] WPIDS

DNC C1991-124726

h

eb c

g cg b

cg

eb

TI Prodn. of fatty acid lower alcohol ester(s) - by transesterification of **glyceride(s)** under specified conditions.

DC B05 D13 D21 D25 E17 H06

IN WIMMER, T

PA (VOGE-N) VOGEL & NOOT INDUSTRIEANLAGENBAU; (WIMM-I) WIMMER T; (VOGE-N) VOGEL & NOOT IND GMBH; (VOGE-N) VOGEL & NOOT IND; (VOGE-N) VOGEL & NOOT IND GMBH

CYC 24

PI AT 9001386 A 19910915 (199140)\*  
 WO 9200268 A 19920109 (199205) B DE 15p  
 RW: AT BE CH DE DK ES FR GB GR IT LU NL SE  
 W: AU BG BR HU PL SU US

AU 9180742 A 19920227 (199218)  
 ZA 9104972 A 19920429 (199222) 13p C11C  
 EP 489883 A1 19920617 (199225) DE C07C067-03  
 HU 59369 T 19920528 (199227) C07C067-03  
 BR 9105796 A 19920922 (199243) C07C067-03  
 CS 9200587 A2 19921014 (199311) C07C067-03  
 AU 641525 B 19930923 (199345) C07C067-03  
 HU 209912 B 19941128 (199502) C07C067-03  
 US 5399731 A 19950321 (199517) 5p C11C003-10  
 CZ 279421 B6 19950412 (199523) C07C067-03  
 RU 2058298 C1 19960420 (199703) 7p C07C067-03

ADT AT 9001386 A AT 1990-1386 19900629; ZA 9104972 A ZA 1991-4972 19910627; EP 489883 A1 EP 1991-912029 19910628; WO 1991-AT76 19910628; HU 59369 T WO 1991-AT76 19910628; HU 1992-464 19910628; BR 9105796 A BR 1991-5796 19910628; WO 1991-AT76 19910628; CS 9200587 A2 CS 1992-587 19920227; AU 641525 B AU 1991-80742 19910628; HU 209912 B WO 1991-AT76 19910628; HU 1992-464 19910628; US 5399731 A WO 1991-AT76 19910628; US 1992-834255 19920310; CZ 279421 B6 CS 1992-587 19910628; RU 2058298 C1 SU 1991-5011430 19910628; WO 1991-AT76 19910628

FDT EP 489883 A1 Based on WO 9200268; HU 59369 T Based on WO 9200268; BR 9105796 A Based on WO 9200268; AU 641525 B Previous Publ. AU 9180742, Based on WO 9200268; HU 209912 B Previous Publ. HU 59369, Based on WO 9200268; US 5399731 A Based on WO 9200268; CZ 279421 B6 Previous Publ. CS 9200587

PRAI AT 1990-1386 19900629; WO 1991-AT76 19910628

REP DE 3020612; DE 3107318; WO 9105034

IC ICM C07C067-03; C11C003-10; C11C017-00

ICS C07C069-24; C07C069-52; C11C003-04

AB AT 9001386 A UPAB: 19961211

Prodn. of fatty acid esters (I) of 1-5C monohydric alcohols (II) is effected by (a) transesterifying fatty acid **glycerides** (III) with (II) in the presence of an alkaline earth metal base (IV); (b) adding **water** or a dil. acid or a dil. soln. of an acidic salt in an amt. of 0.1-5 wt.% while stirring; and (c) separating (I) as upper phase after settling. The amt. of (II) used is 1.1-1.8 moles per mole of fatty acid **gps.** in (III). The amt. of (IV) used is x + y moles, where x is at least 0.025 moles per 100g (III), and y is 1 equiv. per mole of free fatty acids in (III).

USE/ADVANTAGE - (I) are useful as pharmaceutical, dietetic or cosmetic raw materials, diesel **fuels**, heating oils or intermediates for prodn. of fatty alcohols, **surfactants**, lubricants, etc.. The process may be operated at ambient temp. and atmospheric pressure using simple equipment, uses only a small excess of (II), and gives yields of up to 100%. (Abstract replaced; based on WO9200268, First major country equivalent to A79001386)

FS CPI

FA AB; DCN

MC CPI: B10-G02; D03-C; D03-H01T; D08-B; D10-A01; E10-G02E; H06-B04; H06-B05; H07-A; H08-E05

L2 ANSWER 6 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

h ebc gcg b cg

eb

AN 1991-218424 [30] WPIDS  
DNC C1991-094862  
TI Lyso-lecithin compsn., for improved fluidity, etc. - contg. lyso-lecithin, middle linear fatty acid tri **glyceride**, and free fatty acid, for improved **water** dispersibility.  
DC D13  
PA (SHOS) SHOWA SANGYO CO  
CYC 1  
PI JP 03139246 A 19910613 (199130)\* 4p  
JP 2821779 B2 19981105 (199849) 5p A23J007-00  
ADT JP 03139246 A JP 1989-274844 19891024; JP 2821779 B2 JP 1989-274844 19891024  
FDT JP 2821779 B2 Previous Publ. JP 03139246  
PRAI JP 1989-274844 19891024  
IC A23J007-00; A23L001-03; B01F017-14; C07F009-10  
ICM A23J007-00  
ICS A23L001-03; A23L001-035; B01F017-14; C07F009-10  
AB JP 03139246 A UPAB: 19930928  
Lysolecithin compsn. contains (a) lysolecithin of 90-99 w/w%, (b) middle linear fatty acid triglyceride of 1-10 w/w% and opt. (c) free fatty acid or below 5 w/w%. Pref. lysolecithin is prepd. by treating lecithin originated from soybeans, corn, rapeseed, yolk, etc. with phospholipase for lysolising rate 10-100% (30-100%). As free fatty acid linolic, oleic, stearic or palmitic-acid, etc. can be used and for improving fluidity of lysolecithin, linolic- and oleic-acid are pref. used. Lecithin has been used widely as **surfactant**, antioxidant and emulsifier in food, as additive for lubricant, **fuel** oil, etc., surface-treating agent in textile and electronic-industry, etc. and functional food showing blood pressure-suppressing activity. It has defects in hydrophilic property and emulsion stability and by converting it to lysolecithin, those defects are mitigated. Lysolecithin has had defects in preservative stability, emulsifying property, etc..  
USE/ADVANTAGE - By combining small amt. of middle linear fatty acid triglyceride and opt. free fatty acid, fluidity, **water** dispersibility, emulsifying property, etc. of lysolecithin can be improved and compsn. also has good preservative stability. @ (4pp Dwg.No.0/0)  
FS CPI  
FA AB  
MC CPI: D10-B01

L2 ANSWER 7 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full  
Text

AN 1985-244157 [40] WPIDS  
DNC C1985-105763  
TI **Surfactant** contg. specified anionic gps. - of use in forming oil-**water** emulsions in which the aq. phase has a high dissolved inorganic content.  
DC A17 A97 E19 H07 H08  
IN BAKER, A S  
PA (ICIL) IMPERIAL CHEM IND PLC  
CYC 14  
PI EP 156572 A 19851002 (198540)\* EN 15p  
R: BE CH DE FR GB IT LI NL SE  
GB 2157700 A 19851030 (198544)  
AU 8540062 A 19850926 (198546)  
JP 60212214 A 19851024 (198549)  
ZA 8501857 A 19851121 (198609)  
ES 8603562 A 19860416 (198625)  
CA 1244463 A 19881108 (198849)  
ADT EP 156572 A EP 1985-301640 19850308; GB 2157700 A GB 1985-6009 19850308;  
ZA 8501857 A ZA 1985-1851 19850312; ES 8603562 A ES 1985-541468 19850321  
PRAI GB 1984-7300 19840321; GB 1985-6009 19850308  
REP A3...8647; DE 1270723; FR 1464331; GB 1054276; GB 1059847; No-SR.Pub; US 3502677; US 3833624; US 4148605

h ebc g cg b cg

cb

IC B01F017-00; C08F008-00; C08F110-10; C10M145-18; C10M151-04; C10M153-04;  
C10M173-00; C10N040-08; C11D001-12; C11D003-06

AB EP 156572 A UPAB: 19930925

A cpd. (I) contains in the molecule a hydrophobic component (A) and a hydrophilic component (B) covalently bonded together; (A) is a satd. or unsatd. 30-5000C hydrocarbon group, and (B) contains a phosphate, phosphonate, sulphate, sulphonate or carboxymethyl anionic group.

Pref. component A is the polymer of a 2-6C monolefin, or the residue of a poly(isobutenyl) succinic anhydride (C) of mol.wt. 400-5000. I may be neutralised with ammonia or an inorganic or organic base.

USE/ADVANTAGE - Cpd. I are of use as **surfactants**, e.g. emulsifiers, in liquid systems containing an oil phase and an aq. phase, and as dispersants in non-aq. systems. They do not lose their efficiency at high temps., e.g. 100 deg.C. Fatty **glycerides**, mineral oils, hydrocarbon fuel oils, liquid hydrocarbons, synthetic lubricants, bitumens, waxes and polyolefins may be emulsified in **water**; the **water** phase may contain a high dissolved inorganic content, e.g. of sodium, magnesium or calcium chloride. The emulsions are of use as hydraulic fluids, cutting oils and other metal-working fluids.

0/0

FS CPI

FA AB

MC CPI: A08-S05; A12-W02A; A12-W12C; E05-G02; E05-G03D; E05-G09C; E10-A08;  
E10-A09A; E10-A09B2; E10-B02D; E10-C02F; E10-C04F; H08-E05

L2 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:610334 CAPLUS

DN 139:151533

TI Method for the preparation of biliquid foam compositions

IN Guffogg, Philip Ernest; Wheeler, Derek Alfred

PA Disperse Limited, UK

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM B01J013-00

ICS A61K007-06; A61K007-48

CC 47-5 (Apparatus and Plant Equipment)

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064024	A1	20030807	WO 2003-GB421	20030131

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI GB 2002-2312 A 20020131

AB A method for the prepn. of a polyaphron (or biliquid foam) which does not rely upon the initial formation of a gas foam, in which a stirrer having a single or a multiplicity of blades is used, the stirrer being operated in a manner such that at least one part of the stirrer mechanism breaks the interface between the continuous polar phase used to form the biliquid foam and the air, the non-polar phase being added dropwise at least initially while stirring the continuous polar phase and the rate of addn. of the non-polar phase being controlled so that a biliquid foam compn. is formed.



ST polyaphron formation stirrer; biliquid foam formation stirrer  
IT Alcohols, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(C12-13, ethoxylated, C12-13 Pareth-3; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT **Glycerides**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(C8-10; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Kerosene  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Finalan 75; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Fats and Glyceridic oils, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(avocado; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(di-Me, Me hydrogen polysiloxane-; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(di-Me, Me hydrogen, polyoxyalkylene-; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Cyclosiloxanes  
RL: MOA (Modifier or additive use); USES (Uses)  
(di-Me; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Castor oil  
RL: MOA (Modifier or additive use); USES (Uses)  
(ethoxylated, Etocas 25; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Castor oil  
RL: MOA (Modifier or additive use); USES (Uses)  
(hydrogenated, ethoxylated, Croduret 50; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Fatty acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(lanolin; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Diesel fuel  
Industrial process waters  
Odor and Odorous substances  
Petroleum products  
Polar molecules  
**Surfactants**  
(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Coconut oil  
Gasoline  
Soybean oil  
Sunflower oil  
RL: MOA (Modifier or additive use); USES (Uses)  
(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Hydrocarbon oils  
RL: TEM (Technical or engineered material use); USES (Uses)  
(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Lanolin

RL: MOA (Modifier or additive use); USES (Uses)  
(oil; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Foams  
(polyaphrons; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT 57-10-3D, Hexadecanoic acid, derivs 143-28-2, Oleyl alcohol 544-63-8D, Tetradecanoic acid, derivs 9004-82-4, Sodium Lauryl ether sulfate 9004-98-2, Oleth-10 9005-64-5, Polysorbate 20 9006-65-9, Dimethicone 16958-85-3, Octyl palmitate 31692-79-2, Dimethiconol 56275-01-5 68171-33-5, Isopropyl isostearate 195868-36-1, Phenyl trimethicone

RL: MOA (Modifier or additive use); USES (Uses)  
(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 107-21-1, Ethylene glycol, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Alfred, W; US 6312760 B1 2001 CAPLUS
- (2) Ames, T; US 6054319 A 2000 CAPLUS
- (3) Color Access Inc; WO 0162214 A 2001 CAPLUS
- (4) Schmidt, W; WO 0105481 A 2001 CAPLUS
- (5) Sebba, F; US 4486333 A 1984 CAPLUS

L2 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609731 CAPLUS

DN 139:151702

TI Methods of increasing flotation rate

IN Yoon, Roe-Hoan

PA USA

SO U.S. Pat. Appl. Publ., 12 pp., Division of U.S. Ser. No. 573,441.

CODEN: USXXCO

DT Patent

LA English

IC ICM B03D001-14

NCL 209164000

CC 48-1 (Unit Operations and Processes)

Section cross-reference(s): 49

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2003146134	A1	20030807	US 2002-218979	20020814
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US 2000-573441	A3	20000516		
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PI US 2003146134 A1 20030807 US 2002-218979 20020814

PRAI US 2000-573441 A3 20000516

AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation were developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles used in flotation. The hydrophobicity-enhancing reagents include low HLB **surfactants**, naturally occurring lipids, modified lipids, and hydrophobic polymers. These methods can greatly increase the rate of flotation for the particles that are usually difficult to float, such as ultrafine particles, coarse particles, middlings, and the particles that do not readily float in the water contg. large amts. of ions derived from the particles. New collectors for the flotation of phosphate minerals are disclosed.

ST flotation collector hydrophobic nonionic polymer **surfactant** HLB phosphate; nonionic **surfactant** fatty glycol **glyceride** ester amide amine lipid

IT Hydrophile-lipophile balance value

h

ebc

g cg b

cg

eb

(<15; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkoxylated, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (animal; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polar solvents  
 (aprotic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (chloro; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents  
 (collectors; methods of increasing flotation rate with hydrophobic neutral additives)

IT Lanolin  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (derivs.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Petroleum products  
 (distillates; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrophobicity  
 (enhanced by additives; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT Glycols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ethers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Alcohols, uses  
 Amines, uses  
 Fatty acids, uses  
**Glycerides, uses**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bituminous coal  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
 (fines; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (fish; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents  
 (frothers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (glyceryl; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (glycol; methods of increasing flotation rate with hydrophobic neutral

additives)

IT **Glycerides**, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (hydrogenated; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Particles**  
 (hydrophobic and hydrophilic; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Polymers**, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (hydrophobic; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Flotation**  
 (increased rate of; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Clays**, processes  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
 (kaolinitic; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Esters**, uses  
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
 (lard, Et esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Hydrocarbon oils**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (light oils; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Hydrocarbons**, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (lower, aliph.; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Linear low density polyethylenes**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (metallocene-catalyzed; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Bubbles**  
**Diesel fuel**  
 Ionic strength  
 Milling (size reduction)  
 Slurries  
 Solvents  
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT **Aromatic hydrocarbons**, uses  
**Diglycerides**  
**Ethers**, uses  
**Fatty acids**, uses  
**Glycerides**, uses  
**Glycols**, uses  
**Kerosene**  
**Ketones**, uses  
**Ligroine**  
**Lime** (chemical)  
**Monoglycerides**  
**Naphtha**  
**Polysilanes**  
**Soybean oil**  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT **Anthracite**

- Coal, processes  
Copper ores, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT Lipids, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(naturally occurring and modified; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Surfactants**  
(nonionic; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Minerals, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(phosphate; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Copper ores, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(porphyry; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Amides, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(reaction products from **glycerides**; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Glycerides**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(reaction products from thioesterification; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Alcohols, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(short-chain, C1-7; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Polymers, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(silicon-contg.; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Fatty acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(tall-oil; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Particles**  
(ultrafine; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Fats and Glyceridic oils, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(vegetable, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)
- IT Fats and Glyceridic oils, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(vegetable; methods of increasing flotation rate with hydrophobic neutral additives)
- IT 64-19-7, Acetic acid, uses  
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)  
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT 50-99-7D, Glucose, esters of 56-23-5, Carbon tetrachloride, uses  
57-50-1D, Sucrose, esters of 67-68-5, Dimethyl sulfoxide, uses  
68-12-2, Dimethylformamide, uses 75-15-0, Carbon disulfide, uses  
107-97-1D, Sarcosine, derivs. 872-50-4, N-Methylpyrrolidone, uses  
1336-21-6, Ammonium hydroxide 1338-43-8, Span 80 1344-09-8, Sodium

silicate 2720-73-2, Potassium amyl xanthate 5116-94-9 7664-38-2D,  
 Phosphoric acid, esters 9002-88-4D, Polyethylene, derivs. 9004-73-3D,  
 Poly(methylhydrosiloxane), derivs. 12441-09-7D, Sorbitan, derivs.  
572924-33-5, Shellfloat 758 572924-40-4, Aero 6973

RL: MOA (Modifier or additive use); USES (Uses)

(methods of increasing flotation rate with hydrophobic neutral additives)

IT 1308-56-1P, Chalcopyrite, processes 1309-56-4P, Molybdenite  
1314-56-3P, Diphosphorus pentoxide (P2O5), processes 7782-42-5P,  
 Graphite, processes 14807-96-6P, Talc, processes  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or  
 recovery); PYP (Physical process); PREP (Preparation); PROC (Process)

(methods of increasing flotation rate with hydrophobic neutral additives)

IT 1317-70-0, Anatase 1332-37-2, Iron oxide, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); REM (Removal or disposal); PROC (Process)  
 (methods of increasing flotation rate with hydrophobic neutral  
 additives)

L2 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609679 CAPLUS

DN 139:135902

TI Tall-oil pitch-based and **glyceride**-based chemical change agent for  
 production of solid **coal**-based synthetic **fuel** briquets

IN Giampa, Vince M.; Dubiel, John T.; Lyons, Orville

PA Ceredo Liquid Terminal Inc., USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

TC ICM C10L005-14

ICS C10L005-44; C10L005-16

NCL 044565000; 044577000

CC 51-15 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 45

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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<u>PI</u> US 2003145516	A1	20030807	<u>US 2002-68285</u>	20020205
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<u>PRAI</u> US 2002-68285		20020205		
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AB A chem. change agent for prepn. of **coal**-based synthetic **fuel** briquets  
 consists of **water** 0-70, tall oil and tall-oil pitch 0-60,  
 C16-18-**glycerides** 0.25-40, and **surfactants** 0.25-4 wt.%, with 50-200  
 cP, sulfur content <0.2 wt.%, and closed cup flash point >200°, and  
 can be stable when stored as an emulsion at 21-71°. The chem.  
 change agent is produced by first heating a tall-oil pitch to >93°  
 and adding **water**, **glycerides**, and **surfactant** to form an emulsion.  
 The **coal**-based synthetic **fuel** briquets are then prepd. from 98.8-99.5  
 wt.% **coal** and 0.5-1.2 wt.% of the above emulsion, followed by pressing  
 the mixt. to briquets.

ST **coal** briquet synthetic **fuel** tall oil pitch; **glyceride** tall oil pitch  
**coal** synthetic **fuel**

IT **Glycerides**, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(C16-18, emulsions; tall-oil pitch-based and **glyceride**-based  
 chem. change agent for prodn. of solid **coal**-based synthetic  
**fuel** briquets)

IT **Fuel** briquets

(**coal**-based solids; tall-oil pitch-based and  
**glyceride**-based chem. change agent for prodn. of solid  
**coal**-based synthetic **fuel** briquets)

h ebc gcg b cg

eb

IT Corn oil  
 Cottonseed oil  
 Palm oil  
 Soybean oil  
 Tall oil  
 Tall oil pitch  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (emulsions; tall-oil pitch-based and **glyceride**-based chem.  
 change agent for prodn. of solid **coal**-based synthetic  
**fuel** briquets)

IT **Fuels**  
 (synthetic, solid briquets; tall-oil pitch-based and **glyceride**  
 -based chem. change agent for prodn. of solid **coal**-based  
 synthetic **fuel** briquets)

IT **Surfactants**  
 (tall-oil pitch-based and **glyceride**-based chem. change agent  
 for prodn. of solid **coal**-based synthetic **fuel**  
 briquets)

IT Fats and Glyceridic oils, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (vegetable, emulsions; tall-oil pitch-based and **glyceride**  
 -based chem. change agent for prodn. of solid **coal**-based  
 synthetic **fuel** briquets)

L2 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2003:434448 CAPLUS	
DN 139:8464	
TI Method of increasing flotation rate of hydrophobic particles	
IN Yoon, Roe-Hoan	
PA USA	
SO PCT Int. Appl., 30 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM B03D001-014	
ICS B03D001-016; B03D001-018; B03D001-02; B03D001-008	
CC 46-4 (Surface Active Agents and Detergents)	
FAN.CNT 2	
PATENT NO.	KIND DATE APPLICATION NO. DATE
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<u>PI</u> <u>WO 2003045566</u>	<u>A1</u> <u>20030605</u> <u>WO 2001-US47680</u> 20011125
W: AT, AU, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, ID, IL, IN, IS, JP, KR, LT, LU, LV, MN, MX, NO, NZ, PL, PT, RU, SE, TJ, TR, UA, US, VN	
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR	
<u>WO 2003039714</u>	<u>A1</u> <u>20030515</u> <u>WO 2002-US4815</u> 20020220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
<u>PRAI</u> <u>US 2000-527186</u>	<u>A</u> 20000317
<u>WO 2001-US47680</u>	<u>A</u> 20011107
AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation have been developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles	

used in flotation. The hydrophobicity-enhancing reagents include low HLB **surfactants**, naturally occurring lipids, modified lipids, and hydrophobic polymers. These methods can greatly increase the rate of flotation for the particles that are usually difficult to float, such as ultrafine particles, coarse particles, middlings, and the particles that do not readily float in the water contg. large amts. of ions derived from the particles. In addn., new collectors for the flotation of phosphate minerals are disclosed.

- ST hydrophobic particle flotation hydrophobicity enhancer
- IT Fats and Glyceridic oils, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (animal; method of increasing flotation rate of hydrophobic particles)
- IT Alcohols, uses
  - Amides, uses
  - Amines, uses
  - Fatty acids, uses
  - Glycerides**, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (ethoxylated, nonionic **surfactants**; method of increasing flotation rate of hydrophobic particles)
- IT Esters, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (fatty, ethoxylated, nonionic **surfactants**; method of increasing flotation rate of hydrophobic particles)
- IT Esters, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (fatty, nonionic **surfactants**; method of increasing flotation rate of hydrophobic particles)
- IT Fats and Glyceridic oils, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (fish; method of increasing flotation rate of hydrophobic particles)
- IT Coal, processes
  - RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
  - (hydrophobic particles; method of increasing flotation rate of hydrophobic particles)
- IT Flotation
  - (method of increasing flotation rate of hydrophobic particles)
- IT Polysilanes
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (method of increasing flotation rate of hydrophobic particles)
- IT Copper ores, processes
  - Kaolin, processes
  - RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
  - (method of increasing flotation rate of hydrophobic particles)
- IT Lipids, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (method of increasing flotation rate of hydrophobic particles)
- IT Ethers, uses
  - Fatty acids, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (nonionic **surfactants**; method of increasing flotation rate of hydrophobic particles)
- IT **Surfactants**
  - (nonionic, hydrophobicity-enhancing reagents; method of increasing flotation rate of hydrophobic particles)
- IT Fats and Glyceridic oils, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (vegetable, ethoxylated, nonionic **surfactants**; method of increasing flotation rate of hydrophobic particles)
- IT Fats and Glyceridic oils, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (vegetable; method of increasing flotation rate of hydrophobic



particles)  
 IT 49718-23-2, Methylsilanediol homopolymer  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (assumed monomers; method of increasing flotation rate of hydrophobic particles)  
 IT 1309-56-4, Molybdenite 7782-42-5, Graphite, processes 14807-96-6,  
 Talc, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (hydrophobic particles; method of increasing flotation rate of hydrophobic particles)  
 IT 9004-73-3, Polymethylhydrogensiloxane  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (method of increasing flotation rate of hydrophobic particles)  
 RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
 (1) Brookes; US 4857221 A 1989 CAPLUS  
 (2) Brookes; US 4859318 A 1989 CAPLUS  
 (3) Keys; US 4589980 A 1986 CAPLUS  
 (4) Keys; US 4678563 A 1987 CAPLUS  
 (5) Mitzmager; US 3480143 A 1969  
 (6) Versitech; WO 0009268 A1 2000 CAPLUS  
 (7) Welch; US 5407080 A 1995 CAPLUS

L2 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Citing  
 Text References  
 AN 2003:301160 CAPLUS  
 DN 138:323729  
 TI Stable water-in-oil diesel fuel emulsions containing fatty esters and partial esters of alcohols and alkoxylated alcohols  
 IN Oldfield, Andrew Simon; Thompson, Lee  
 PA Imperial Chemical Industries PLC, UK  
 SO PCT Int. Appl., 18 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C10L001-32  
 CC 51-9 (Fossil Fuels, Derivatives, and Related Products)  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031540	A1	20030417	WO 2002-GB4254	20020919

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI GB 2001-24117 A 20011008

AB Stable water-in-oil diesel fuel emulsions contain emulsifiers consisting of polymeric nonionic surfactants selected from: (1) fatty acid esters or partial esters of polyhydric alcs., (2) alkoxylated fatty acid esters or partial esters of polyhydric alcs., and (3) alkoxylated primary alcs., such that the emulsifier has a hydrophile-lipophile balance (HLB) of >4. The emulsifiers, which are present at 0.1-4 wt.% (preferably 1-2.5 wt.%) concn., are prepd. from polyhydric alcs. with  $\geq 3$  hydroxyl groups (esp. glycerol or sorbitol) and C12-24-linear or branched, satd. or unsatd. fatty acids. The alkoxylated alcs. are prepd. from

h eb c g c g b c g

eb

C7-20-alcs. and have a d.p.  $\leq 30$ . In addn., the emulsions can contain C5-15-primary alcs. (preferably C6-12-alcs.) as emulsion couplers.

ST diesel **fuel** emulsion fatty ester emulsifier; alkoxyated alc ester emulsifier diesel **fuel**; alc emulsifier diesel **fuel**

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C12-24, esters, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C16-20, esters, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C5-15, emulsion couplers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C6-12, emulsion couplers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C7-20, alkoxyated, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (C9-15, alkoxyated, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkoxyated; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkyl group-terminated; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Emulsions  
 (diesel **fuel**; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Diesel **fuel** additives  
 (emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Glycerides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Diesel **fuel**  
 (emulsions; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters with alkoxyated alcs.; stable **water**-in-oil diesel

fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters with polyhydric alcs.; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (mono(alkyl group)-terminated; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT Emulsifying agents  
**Surfactants**  
 (nonionic; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT Hydrophile-lipophile balance value  
 (stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT Polyesters, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**surfactants**; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT 50-70-4D, Sorbitol, esters 56-81-5D, Glycerol, esters 57-11-4D, Stearic acid, esters 112-80-1D, Oleic acid, esters 132175-04-3, Hypermer A 60 512175-04-1, Hypermer A 70  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (emulsifiers; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT 111-87-5, 1-Octanol, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (emulsion couplers; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

IT 1338-43-8, Span 80 9005-70-3, Tween 85 26266-58-0, Span 85  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (**surfactants**; stable ~~water~~-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyolated alcs.)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Ambrosini, T; WO 0151593 A 2001 CAPLUS  
 (2) Caterpillar Inc; WO 9963024 A 1999 CAPLUS  
 (3) Eisenbeis, A; WO 0155282 A 2001  
 (4) Ici Ltd; GB 2002400 A 1979 CAPLUS  
 (5) Ici Plc; GB 2117398 A 1983 CAPLUS  
 (6) Labofina Sa; GB 2066288 A 1981 CAPLUS

L2 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:133382 CAPLUS

DN 138:190504

TI Biodegradable **surfactant** for invert emulsion drilling fluid

IN Patel, Arvind D.; Hoxha, Burnhan; Bell, Reginald J.

PA M-I L.L.C., USA

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C09K007-06

h eb c g cg b cg

eb

ICS C09K007-00  
CC 51-2 (Fossil Fuels, Derivatives, and Related Products)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003014253	A1	20030220	WO 2002-US25353	20020809
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003114316	A1	20030619	US 2001-927619	20010810
PRAI	US 2001-927619	A	20010810		
AB	An invert emulsion drilling fluid includes an oleaginous continuous phase; a nonoleaginous discontinuous phase; a biodegradable <b>surfactant</b> including a di-fatty acid ester of triglycerol; and a weighting agent. It is preferred that the fatty acid have the formula RCO <sub>2</sub> H in which R is an alkyl or alkenyl having 10 to 20 carbon atoms. The oleaginous fluid is selected from diesel oil, mineral oil, synthetic oil, ester oils, <b>glycerides</b> of fatty acids, aliph. esters, aliph. ethers, aliph. acetals, or other such hydrocarbons and combinations of these and similar compds. The nonoleaginous phase is selected from fresh <b>water</b> , sea <b>water</b> , brine, aq. solns. contg. <b>water</b> sol. org. salts, <b>water</b> sol. alcs. or <b>water</b> sol. glycols or combinations of these and similar compds. The weighting agent is any suitable weighting agent and is preferably selected from <b>water</b> insol. weighting agents such as barite, calcite, mullite, galena, manganese oxides, iron oxides, or combinations of these or <b>water</b> sol. weighting agents such as <b>water</b> sol. salts of zinc, iron, barium, calcium or combinations of these and similar compds.				
ST	biodegradable <b>surfactant</b> invert emulsion drilling fluid thermal brine stability; well treatment fluid biodegradable thixotropy polyglyceryl fatty acid diester				
IT	Paraffin oils				
	RL: TEM (Technical or engineered material use); USES (Uses) (Bio Base-300; biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Fatty acids, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (C10-20, diesters with diglycerol and triglycerol; biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Fatty acids, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (C10-20, unsatd., diesters with diglycerol and triglycerol; biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Acetals				
	Esters, uses Ethers, uses RL: TEM (Technical or engineered material use); USES (Uses) (aliph.; biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Diesel fuel				
	Drilling fluids Seawater (biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Tall oil				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (biodegradable <b>surfactant</b> for invert emulsion drilling fluid)				
IT	Hydrocarbon oils				
h	ebc	g	cg	b	cg
					cb

Lime (chemical)  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT **Surfactants**  
 (biodegradable; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Thixotropic agents  
 (effect of thermal aging and cement or brine on effectiveness of; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Stability  
 (elec., of the inverted emulsion; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Brines  
 (for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT **Glycerides**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (for oil phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Drilling fluids  
 (inverted emulsions; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Salts, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (org., **water-sol.**, for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Cement  
 (portland, Class G; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Biodegradable materials  
 (**surfactants**; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Esters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (synthetic, for oil phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Alcohols, uses  
 Glycols, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (**water-sol.**, for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT 67-48-1, Choline chloride 7447-40-7, Potassium chloride, uses 7647-14-5, Sodium chloride, uses 7786-30-3, Magnesium chloride, uses 10043-52-4, Calcium chloride, uses 28299-33-4, NOVAWET 67938-21-0, Diglyceryl diisostearate 130392-39-1, REV DUST 136753-47-4, VERSACOAT 136753-49-6, VERSAMOD 136753-51-0, VERSA SWA 167140-10-5, NOVAMUL 220880-98-8, Ecotrol 221902-96-1, VG Plus 370106-53-9, VERSAVERT F 498554-36-2, Nova Plus  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT 471-34-1, Calcium carbonate, uses 1305-62-0, Calcium hydroxide, uses 12001-31-9, Bentone 38 56090-54-1D, Triglycerol, C10-C20 alkyl or alkenyl di-fatty acid esters 59113-36-9D, Diglycerol, C10-C20 alkyl or alkenyl di-fatty acid esters 66082-42-6, Triglyceryl diisostearate 254995-18-1, Bentone 155 449211-85-2, MI Bar 498554-49-7, Amodril 1000  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT 498553-01-8, Emulpharma PG 20  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (emulsifier; biodegradable **surfactant** for invert emulsion drilling fluid)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 7439-89-6D, Iron,

water-sol. salts 7440-39-3D, Barium, water-sol. salts  
 7440-66-6D, Zinc, water-sol. salts 7440-70-2D, Calcium,  
 water-sol. salts 11129-60-5, Manganese oxide 12179-39-4,  
 Galena 13462-86-7, Barite  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)

(weighting agent; biodegradable surfactant for invert  
 emulsion drilling fluid)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Flider; US 5380469 A 1995 CAPLUS

(2) Jakobson; US 5424469 A 1995 CAPLUS

(3) Jakobson; US 5466719 A 1995 CAPLUS

(4) Walker; US 4464269 A 1984 CAPLUS

L2 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:888857 CAPLUS

DN 137:372374

TI Aromatics-free diesel fuel emulsions containing plant-derived glyceridic  
 oils and fatty esters

IN Castiglioni, Antonio M.; Giupponi, Massimiliano; Lombardi, Alessandro

PA Exxonmobil Chemical Patents Inc., USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C10L001-02

ICS C10L001-32

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002092731	A1	20021121	WO 2002-EP4880	20020503

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI IT 2001-MI1002 A 20010516

AB Aroms.-free diesel fuels consist of a non-arom. hydrogenated hydrocarbon  
 component (esp. paraffins, isoparaffins, and cycloparaffins) 100, a plant  
 or animal oil (or derived fatty acid ester) 1-50, water 0-30, and  
 surfactants and stabilizers  $\leq 4$  vol. parts. The hydrocarbon  
 component has a boiling range 140-230°, flammability point  
 30-150°, and a distn. range boiling width of 5-50° (e.g., a  
 narrow-boiling hydrogenated gas oil). Suitable plant oils are selected  
 from rapeseed oil, sunflower oil, soybean oil, and palm oil, and their  
 corresponding Me esters. Suitable stabilizers and surfactants include  
 nonionic surfactants (preferably ethoxylated alcs.), ethoxylated (and/or  
 propoxylated) polyols, sorbitan monooleate, ethylene glycol, and  
 polyethylene glycol C16-18-alkyl ethers.

ST diesel fuel glyceridic oil emulsion; plant glyceridic oil methyl ester  
 diesel fuel emulsion; gas oil glyceridic emulsion diesel fuel

IT Polyoxyalkylenes, uses

RL: NUU (Other use, unclassified); USES (Uses)

(C16-18-alkyl ethers, surfactants, for diesel fuel  
 substitutes; aroms.-free diesel fuel emulsions contg.)

h eb c g c g b c g eb

plant-derived glyceridic oils and fatty esters)

IT **Glycerides**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (animal, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Diesel **fuel** substitutes  
 (aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Palm oil  
 Rape oil  
 Soybean oil  
 Sunflower oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Emulsions  
 (diesel **fuel**, substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Diesel **fuel**  
 (emulsions, substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alcohols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (ethoxylated, **surfactants**, for diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Gas oils  
 (hydrocarbon component, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alkanes, uses  
 Cycloalkanes  
 Isoalkanes  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (hydrocarbon component, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (palm-oil, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (plant oils, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT **Glycerides**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (plant, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alcohols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (polyhydric, ethoxylated, propoxylated, **surfactants**, for diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (rape-oil, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(soya, Me esters, diesel fuel substitutes; aroms.-free diesel  
fuel emulsions contg. plant-derived glyceridic oils and fatty  
esters)

IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(sunflower-oil, Me esters, diesel fuel substitutes;  
aroms.-free diesel fuel emulsions contg. plant-derived  
glyceridic oils and fatty esters)

IT 107-21-1, Ethylene glycol, uses 1338-43-8, Sorbitan monooleate  
RL: NUU (Other use, unclassified); USES (Uses)  
(stabilizer, diesel fuel substitutes; aroms.-free diesel  
fuel emulsions contg. plant-derived glyceridic oils and fatty  
esters)

IT 25322-68-3D, POLYETHYLENE GLYCOL, C16-18-alkyl ethers  
RL: NUU (Other use, unclassified); USES (Uses)  
(surfactants, for diesel fuel substitutes;  
aroms.-free diesel fuel emulsions contg. plant-derived  
glyceridic oils and fatty esters)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
(1) Caterpillar Inc; WO 9963026 A 1999 CAPLUS  
(2) Johnson, L; US 5520708 A 1996 CAPLUS  
(3) Yakobson, D; US 5506272 A 1996 CAPLUS

L2 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:833049 CAPLUS  
DN 137:339766  
TI Recycling of water contaminated oil based drilling fluids  
IN Mueller, Frank Manfred Franz; Rudolph, Juergen  
PA M-I L.L.C., USA  
SO PCT Int. Appl., 15 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM E21B021-06  
ICS B01D017-04; C10G033-04  
CC 51-2 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 46

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002086280	A1	20021031	WO 2002-US13171	20020424
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003100452	A1	20030529	US 2002-132377	20020424
PRAI US 2001-286236P	P	20010424		

OS MARPAT 137:339766

AB An invert emulsion based drilling fluid consisting of an oil component and an aq. component is recycled by mixing the invert emulsion with a emulsion clearing agent which is a mixt. of an anionic and a non-ionic tenside and sepg. the excess water from the residual invert drilling fluid. The anionic tenside is an alkyl sulfate with the general formula R1-O-SO3X with R1 being a linear or branched C1-22 alkyl group and X an alkali or ammonium ion, an alkyl sulfonate with the general formula R2-SO3Y with R2



being a C1-30 alkyl group and Y an alkali or ammonium ion, or an alkyl aryl sulfonate with the general formula  $R_4-A-SO_3Y$  with  $R_4$  being a C1-22 alkyl group, A is an aryl group, and Y is an alkali or ammonium ion. The non-ionic tenside can be an alkyl polyglycoside with the general formula  $R_7-O-G_n$  where  $R_7$  is a linear or branched, satd. or unsatd. C1-22 alkyl group, G is a glucose unit, and n is an integer of 1-10, or it can be a tenside with the general formula  $R_5-O-(EO)_nH$  or  $R_5-O-(EO)_mR_5$  where  $R_5$  is a linear or branched, satd. or unsatd. C1-22 alkyl group, n is 1-5, m is 1-50 and EO can be an ethylene oxide, propylene oxide, or butylene oxide group. The **water** is sepd. in a settling tank or in a cyclone separator. The emulsion contains a weighting material, such as barite, calcite, mullite, gallena, manganese oxides, or iron oxides. The oil component of the drilling fluid can be diesel oil, mineral oil, synthetic oil, C10-19 alkyl and alkylene hydrocarbons, ester oils, **glycerides** of fatty acids, aliph. esters, aliph. ethers, or aliph. acetals.

ST drilling fluid inverted emulsion recycling **water** sepn **surfactant**

IT Acetals

Esters, uses

Ethers, uses

RL: NUU (Other use, unclassified); USES (Uses)

(aliph.; recycling of **water** contaminated oil based drilling fluids)

IT Sulfonic acids, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkanesulfonic, salts, C1-30, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Sulfates, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkyl, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Glycosides

RL: NUU (Other use, unclassified); USES (Uses)

(alkyl, nonionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Sulfonic acids, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkylarene, salts, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT **Surfactants**

(anionic; recycling of **water** contaminated oil based drilling fluids)

IT Drilling fluids

(inverted emulsions; recycling of **water** contaminated oil based drilling fluids)

IT Polyethers, uses

RL: NUU (Other use, unclassified); USES (Uses)

(nonionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT **Surfactants**

(nonionic; recycling of **water** contaminated oil based drilling fluids)

IT Cyclone separators

Diesel **fuel**

(recycling of **water** contaminated oil based drilling fluids)

IT **Glycerides**, uses

Hydrocarbon oils

RL: NUU (Other use, unclassified); USES (Uses)

(recycling of **water** contaminated oil based drilling fluids)

IT 7732-18-5, Water, processes

RL: REM (Removal or disposal); PROC (Process)

(recycling of **water** contaminated oil based drilling fluids)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 11129-60-5, Manganese oxide 13397-26-7, Calcite, uses 13462-86-7, Barite

RL: NUU (Other use, unclassified); USES (Uses)

(weighting material; recycling of water contaminated oil based drilling fluids)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Chevron Usa Inc; WO 9635040 A 1996 CAPLUS
- (2) Park, G; US 5195847 A 1993 CAPLUS
- (3) Quintero, L; US 6267716 B1 2001 CAPLUS
- (4) Shupe, R; US 4269271 A 1981 CAPLUS

L2 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Citing  
Text References

AN 2002:596759 CAPLUS

DN 137:127401

TI Method for fluidifying a tar or sludge contained in storage tanks to facilitate removal and disposal

IN Mercier, Jean Michel; Maurice, Jean Charles

PA Rhodia Eco Services, Fr.

SO Fr. Demande, 16 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM C10L010-04

ICS C10L001-32; C11D001-66; B01F017-00; B01F003-12; B08B009-08

CC 51-10 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 46, 60

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2815639	A1	20020426	FR 2000-14129	20001019
PRAI	FR 2000-14129		20001019		

AB The inventions contains a method for fluidifying a tar or a sludge, in which one places in contact a tar or the sludge, in order to form an aq. emulsion, with a solvent: 0.5-50 parts, a surface active agent: 0.1 - 20 parts, water: 2-40 parts, and a dispersant: 0.03-10 part based on 100 parts of tar or sludge. Low temps., from room temp. to 40° are used for the emulsification. This method is esp. applicable to cleaning tanks or cisterns contg. the waste tar or sludges resulting from org. or petrochem. operations; the aq. emulsion obtained from this invention to later be destroyed, possibly by incineration. The invention equally applies to a formulation to fluidifying a tar or a sludge into a temp.-stable emulsion.

ST emulsification tar sludge residue nonionic **surfactant** anionic dispersant solvent; tank cistern cleaning waste sludge emulsion removal ethoxylated **surfactant**

IT Hydrocarbons, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alicyclic, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

Cycloalkanol

RL: NUU (Other use, unclassified); USES (Uses)

(aliph., solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

RL: MOA (Modifier or additive use); USES (Uses)

(alkoxy, hydrogen sulfate, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Glycosides

RL: MOA (Modifier or additive use); USES (Uses)

(alkyl polyglycosides; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses

h eb c g c g b c g

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RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)  
 (alkyl, ethoxylated, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Glycosides  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkyl; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (alkyl; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sulfonic acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkylarene, salts, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Dispersing agents  
 (anionic, ~~water~~-sol.; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sulfonic acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (arenesulfonic, naphthalene-derived, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tanks (containers)  
 (cleaning of; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tar acids  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (cresylic, derivs., solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tar acids  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (cresylic, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Esters, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (diesters, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)  
 (ethers, phenyl- and alkylphenyl terminated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ethers, phosphono- terminated, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Castor oil  
 Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ethoxylated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (fatty amido group-terminated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Amides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (fatty, alkoxylated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

Amines, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (fatty, ethoxylated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Petroleum products  
 (fractions, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (halo, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sludges  
 (in tanks or cisterns; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Emulsification  
**Surfactants**  
 Thermal stability  
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Aromatic hydrocarbons, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Coal tar  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)  
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Emulsions  
 (microemulsions, oil-in-water; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT **Surfactants**  
 (nonionic; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sludges  
 (petroleum refining residues; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Petroleum refining residues  
 (sludges; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Amines, uses  
 Esters, uses  
 Ethers, uses  
 Hydrocarbons, uses  
 Ketones, uses  
 Nitriles, uses  
 Phenols, uses  
 Thiols (organic), uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Solubility  
 (soly. parameter,  $\delta H$ , 0-14  $\sqrt{J/m^3}$ ; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT **Glycerides**, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (sucrose derivs.; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Carbohydrates, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (sugar esters; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 1321-69-3D, Naphthalenesulfonic acid, sodium salt, condensate, polymers

RL: MOA (Modifier or additive use); USES (Uses)  
(Supragil RM 210 El; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal for cleaning tanks and cisterns)

IT 9016-45-9, Ethoxylated nonylphenol  
RL: MOA (Modifier or additive use); USES (Uses)  
(d.p. 9; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 443891-28-9, Supragil RM 210El  
RL: MOA (Modifier or additive use); USES (Uses)  
(dispersant; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal for cleaning tanks and cisterns)

IT 57-50-1D, Sucrose, esters 57-50-1D, Sucrose, glyceride derivs.  
98-11-3D, Benzenesulfonic acid, alkyl derivs., alkali metal salts  
5138-18-1D, Sulfosuccinic acid, dialkyl esters, alkali metal salts  
7664-38-2D, Phosphoric acid, alkyl esters, alkali metal salts  
7664-93-9D, Sulfuric acid, alkoxyalkyl esters, alkali metal salts  
7664-93-9D, Sulfuric acid, alkyl derivs., alkali metal salts 7664-93-9D, Sulfuric acid, alkylaryl esters, alkali metal salts 8062-15-5D, Lignosulfonate, alkali metal salts 9005-63-4D, Ethoxylated sorbitan, esters 12441-09-7D, Sorbitan, esters 25155-19-5D, NaphthaleneSulfonic acid, alkyl derivs., alkali metal salts 106392-12-5, Ethylene oxide-propylene oxide block copolymer

RL: MOA (Modifier or additive use); USES (Uses)  
(method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 7732-18-5, Water, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 91-20-3, Naphthalene, uses 91-20-3D, Naphthalene, derivs.  
RL: NUU (Other use, unclassified); USES (Uses)  
(solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

L2 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2002:256098	CAPLUS
DN 136:283793	
TI Methods of enhancing fine particle dewatering	
IN Roe-Hoan, Yoon	
PA USA	
SO PCT Int. Appl., 53 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM B01D037-02	
CC 60-3 (Waste Treatment and Disposal)	
Section cross-reference(s): 54	

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>WO 2002026350</u>	A1	20020404	<u>WO 2000-US27082</u>	20000928
W: AT, AU, BR, CA, CN, CZ, DE, FI, GB, HU, ID, KP, KR, LT, MN, MX, NO, NZ, PL, RO, RU, SE, SK, TM, TR, UA, UZ, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
<u>AU 2000077457</u>	A5	20020408	<u>AU 2000-77457</u>	20000928
<u>EP 1333905</u>	A1	20030813	<u>EP 2000-967227</u>	20000928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

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PRAI WO 2000-US27082 A 20000928

AB A new method of improving the process of dewatering fine particle materials is disclosed. In this method, an aq. slurry of fine particles is treated with appropriate hydrophobizing reagents so that the particulate material becomes moderately hydrophobic with its water contact angle considerably below 90°. A low hydrophile-lipophile balance (HLB) no. **surfactant** is then added to the slurry, so that the **surfactant** mols. adsorb on the moderately hydrophobic surface primarily by hydrophobic attraction and, thereby, increase its contact angle close to or above 90°. By virtue of the greatly enhanced hydrophobicity, the **water** mols. adhering to the surface are destabilized and removed more readily by a mech. dewatering process. Any nonionic **surfactant** with its HLB no. below ~15 may be used for the hydrophobicity enhancement. The **surfactants** may be used in conjunction with appropriate solvents such as light hydrocarbon oils and short-chain alcs. The moisture redn. can be further improved by using appropriate electrolytes in conjunction with the low HLB **surfactants**, spraying surface tension lowering reagents onto the filter cake, subjecting the cake to a suitable vibratory means, and by using combinations thereof.

ST particle dewatering **surfactant**

IT Fats and Glyceridic oils, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (animal; methods of enhancing fine particle dewatering)

IT **Surfactants**  
 (cationic; methods of enhancing fine particle dewatering)

IT Drying  
 (dewatering; methods of enhancing fine particle dewatering)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (esters, ethoxylated; methods of enhancing fine particle dewatering)

IT Amines, uses  
 Fatty acids, uses  
**Glycerides**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ethoxylated; methods of enhancing fine particle dewatering)

IT Fats and Glyceridic oils, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (fish; methods of enhancing fine particle dewatering)

IT Ashes (residues)  
 (fly; methods of enhancing fine particle dewatering)

IT Polymers, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (hydrophobic; methods of enhancing fine particle dewatering)

IT Alcohols, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (linear, ethoxylated; methods of enhancing fine particle dewatering)

IT **Surfactants**  
 (low HLB; methods of enhancing fine particle dewatering)

IT Biological materials  
 Diesel **fuel**  
**Fuel oil**  
 Particles  
 (methods of enhancing fine particle dewatering)

IT **Coal**, processes  
 Kaolin, processes  
 Metals, processes  
 Minerals, processes  
 Plastics, processes  
 Sulfide minerals  
 Zinc ores, processes  
 RL: CPS (Chemical process); EPR (Engineering process); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (methods of enhancing fine particle dewatering)

IT Gasoline

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Kerosene  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT Amides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT Ethers, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT Hydrocarbon oils  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT Thiols (organic), uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT **Surfactants**  
 (nonionic; methods of enhancing fine particle dewatering)

IT Fats and Glyceridic oils, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (vegetable, ethoxylated; methods of enhancing fine particle dewatering)

IT 7631-86-9, Silica, processes 12169-28-7, Sphalerite  
 RL: CPS (Chemical process); EPR (Engineering process); PEP (Physical,  
 engineering or chemical process); PYP (Physical process); PROC (Process)  
 (methods of enhancing fine particle dewatering)

IT 71-36-3, Butanol, uses 1338-43-8, Span 80 9005-65-6, Tween 80  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (methods of enhancing fine particle dewatering)

IT 50-99-7D, Glucose, esters 56-81-5D, Glycerol, esters 57-50-1, Sucrose,  
 uses 107-21-1D, 1,2-Ethanediol, derivs. 107-97-1D, Sarcosine, derivs.  
108-11-2, Methylisobutyl carbinol 7664-38-2D, Phosphoric acid, esters  
9004-73-3, Polymethylhydrosiloxane 12441-09-7D, Sorbitan, derivs.  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (methods of enhancing fine particle dewatering)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Falcon-Steward; US 4278208 A 1981
- (2) Kenney; US 5346630 A 1994
- (3) Muralidhara; US 4561953 A 1985 CAPLUS
- (4) Wang; US 4207186 A 1980 CAPLUS
- (5) Wang; US 4210531 A 1980 CAPLUS
- (6) Yoon; US 5670056 A 1997 CAPLUS
- (7) Yoon; US 5814210 A 1998

L2 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2000:731673	CAPLUS
DN 133:311174	
TI Cleaning compositions for fabrics useful for aerosol carpet cleaners	
IN Ochomogo, Maria G.	
PA Clorox Co., USA	
SO Jpn. Kokai Tokkyo Koho, 9 pp.	
CODEN: JKXXAF	
DT Patent	
LA Japanese	
IC ICM C11D010-02	
ICS C11D001-12; C11D003-20; C11D003-43; C11D003-48; C11D003-50;	
C11D017-00; D06B001-02	
CC 46-6 (Surface Active Agents and Detergents)	
FAN.CNT 1	
PATENT NO.	KIND DATE APPLICATION NO. DATE

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PI	JP 2000290696	A2	20001017	JP 1999-101921	19990409
PRAI	JP 1999-101921		19990409		

AB Title comps. comprise (a) 0.1-6% foaming **surfactants**, (b) 0.5-5% nonvolatile hydrophobic org. solvents with **water** soly. at 25° <18%, (c) effective amts. of emulsifiers, (d) effective amts. of propellants, and (e) **water**, where the **surfactants** and solvents interact with the propellants by mixing to form initial foams, which collapse without abrasion into fabric surfaces, upon dispensing and the emulsifiers emulsify the solvents after the foam collapse. Thus a compn. comprised Na lauryl sulfate 2.5, Na laurylsarcosinate 3.5, dipropylene glycol Pr ether 3.0, polyethylene glycol monooleate 0.3, 85:15 isobutane-propane propellant 5.0, volatile amine/sodium benzoate corrosion inhibitor 0.35, fragrance 0.5, Borox 0.75, styrene-maleic anhydride copolymer 3.0, and **water** to 100%.

ST aerosol carpet cleaner compn

IT Aromatic compounds  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C10-12, solvents; cleaning comps. useful for aerosol carpet cleaners)

IT Cleaning  
(app.; cleaning comps. useful for aerosol carpet cleaners)

IT Aerosols  
Carpets  
Detergents  
Emulsifying agents  
Propellants (**fuels**)  
(cleaning comps. useful for aerosol carpet cleaners)

IT Petroleum products  
(distillates, solvents; cleaning comps. useful for aerosol carpet cleaners)

IT **Glycerides**, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifiers; cleaning comps. useful for aerosol carpet cleaners)

IT Polyamide fibers, miscellaneous  
RL: MSC (Miscellaneous)  
(fabrics, carpets; cleaning comps. useful for aerosol carpet cleaners)

IT **Surfactants**  
(foaming; cleaning comps. useful for aerosol carpet cleaners)

IT 106-12-7 9004-96-0, Polyethylene glycol monooleate 25618-55-7D, Polyglycerol, fatty acid esters 37220-82-9, Glycerin oleate  
RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsifier; cleaning comps. useful for aerosol carpet cleaners)

IT 74-98-6, Propane, uses 75-28-5, Isobutane  
RL: TEM (Technical or engineered material use); USES (Uses)  
(propellant; cleaning comps. useful for aerosol carpet cleaners)

IT 112-25-4, Ethylene glycol monohexyl ether 29911-27-1, Dipropylene glycol propyl ether 132739-31-2, Dipropylene glycol mono-tert-butyl ether  
RL: TEM (Technical or engineered material use); USES (Uses)  
(solvent; cleaning comps. useful for aerosol carpet cleaners)

IT 151-21-3, Sodium lauryl sulfate, uses 3097-08-3, Magnesium lauryl sulfate 7631-98-3, Sodium N-laurylsarcosinate 14933-03-0D, Disodium sulfosuccinate, lauramide derivs.  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**surfactant**; cleaning comps. useful for aerosol carpet cleaners)

L2 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1998:561335 CAPLUS

DN 129:190773

TI Alkyl aromatic solvent-based cleaning formulation

IN Wilson, Paul A.

PA Product Source International, Inc., Can.

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SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C11D003-16

ICS C11D003-18; C11D003-43; C11D001-75; C11D001-22; C11D001-34;  
C11D003-20; C11D001-72; C11D001-825; C11D001-83; C11D017-00;  
C11D003-30; A01N025-02; C11D007-50; C09G001-08; C10M105-06

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 857778	A2	19980812	EP 1998-300158	19980109
	EP 857778	A3	19981028		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

US 6239097	B1	20010529	US 1997-781221	19970110
ZA 9800185	A	19990708	ZA 1998-185	19980109
CA 2226767	AA	19980710	CA 1998-2226767	19980113

PRAI US 1997-781221 A 19970110

AB The compn., having excellent balance between solvency, flash point and odor, comprises an alkylated arom. solvent 40-90, a **surfactant** (Surfonic N 95) 3-16, **water** 0-57 and Ammonyx LO 0-6% by wt. Thus, an arom solvent was prepd. by reacting of 1-pentene and toluene in the presence of anhyd. hydrogen fluoride and purifying to give 99% a monoalkylated toluene.

ST **surfactant** monoalkylated toluene cleaning solvent; alkylation arom hydrocarbon cleaning solvent; pentene toluene alkylation solvent

IT Alkylation  
Detergents  
Propellants (**fuels**)

**Surfactants**

(alkyl arom. solvent-based cleaning formulation)

IT **Glycerides**, uses

Lanolin

Waxes

RL: MOA (Modifier or additive use); USES (Uses)

(alkyl arom. solvent-based cleaning formulation)

IT Aromatic hydrocarbons, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(alkyl; alkyl arom. solvent-based cleaning formulation)

IT Beeswax

RL: MOA (Modifier or additive use); USES (Uses)

(synthetic, Sasolv 250; alkyl arom. solvent-based cleaning formulation)

IT 57-11-4, Octadecanoic acid, uses 102-71-6, uses 1317-33-5, Molybdenum

sulfide (MoS2), uses 1643-20-5, Ammonyx LO 2921-88-2, Chlorpyrifos

7439-98-7D, Molybdenum, resins, uses 9005-65-6, Polysorbate 80

27176-87-0, Dodecylbenzenesulfonic acid 37318-79-9, Sorbitan oleate

211629-37-7, Armal 22 211629-38-8, Armal 33 211629-43-5, Desophos

RL: MOA (Modifier or additive use); USES (Uses)

(alkyl arom. solvent-based cleaning formulation)

IT 137-16-6, Hamposyl L 30 9016-45-9, Surfonic N 40

RL: TEM (Technical or engineered material use); USES (Uses)

(alkyl arom. solvent-based cleaning formulation)

IT 108-88-3, reactions 109-67-1, 1-Pentene

RL: RCT (Reactant); RACT (Reactant or reagent)

(alkylation reaction of; alkyl arom. solvent-based cleaning formulation)

IT 71-43-2, Benzene, uses 1330-20-7, Xylene, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(alkylation reaction of; alkyl arom. solvent-based cleaning formulation)

IT 80763-10-6, Propylene glycol-tert-butyl ether

RL: MOA (Modifier or additive use); USES (Uses)

(emulsifier; alkyl arom. solvent-based cleaning formulation)

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IT 124-38-9, Carbon dioxide, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (propellant; alkyl arom. solvent-based cleaning formulation)

L2 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

	Full Text	Citing References		
AN	1984:574468	CAPLUS		
DN	101:174468			
TI	Emulsified <b>fuels</b> of viscous oils			
PA	Toyo Rubber Industry Co., Ltd., Japan; Kawasaki Heavy Industries, Ltd.			
SO	Jpn. Tokkyo Koho, 7 pp. CODEN: JAXXAD			
DT	Patent			
LA	Japanese			
IC	F23C011-00; F23D011-06; C10L001-32			
CC	51-12 (Fossil Fuels, Derivatives, and Related Products)			
FAN.CNT	1			
	PATENT NO.	KIND DATE APPLICATION NO. DATE		
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PI	JP 59025121	B4	19840614	JP 1973-28286
PRAI	JP 1973-28286		19730310	19730310
AB	Emulsified <b>fuels</b> contg. viscous oil 20-80, <b>water</b> 20-80, and <b>surfactant</b> 0.001-5 wt.%, are stable at <100°, have low viscosity, emit low levels of NOx upon combustion, and achieve nearly complete combustion without soot generation. Thus, 200 parts aq. polyoxyethylene nonylphenyl ether sulfate Na salt [9014-90-8] (3 wt.% soln.) at 60-80° was mixed with 200 parts asphalt (specific penetration 80-100) at 100-120° and stirring at 3000 rpm. The emulsion had viscosity 4000 cP at 30° and the droplet diam. of dispersed phase was ~6 µ. The combustion of the sprayed <b>fuel</b> at excess air ratio 1.1-1.3:1 did not generate soot; the concn. of NOx in the flue gas was 220-250 ppm.			
ST	<b>fuel</b> emulsion viscous oil; combustion <b>fuel</b> emulsion; <b>surfactant fuel</b> emulsion; nitrogen oxide <b>fuel</b> emulsion combustion; soot <b>fuel</b> emulsion combustion			
IT	<b>Glycerides</b> , uses and miscellaneous RL: USES (Uses) (dispersants, for <b>fuel</b> emulsions)			
IT	Pitch Asphalt Paraffin oils Waxes and Waxy substances RL: USES (Uses) (emulsions contg., as low-viscosity <b>fuels</b> , manuf. and combustion of)			
IT	Combustion (of emulsified <b>fuels</b> )			
IT	Tar RL: USES (Uses) (coal, emulsions contg., as low-viscosity <b>fuels</b> , manuf. and combustion of)			
IT	Petroleum products (heavy oils, emulsified <b>fuels</b> contg., manuf. and combustion of)			
IT	<u>67-56-1</u> , uses and miscellaneous <u>107-21-1</u> , uses and miscellaneous <u>9002-89-5</u> <u>9005-38-3</u> <u>9014-90-8</u> <u>9016-45-9</u> RL: USES (Uses) (dispersants, for <b>fuel</b> emulsions)			
IT	<u>11104-93-1</u> , uses and miscellaneous RL: RCT (Reactant); RACT (Reactant or reagent) (in flue gases, from combustion of emulsified <b>fuels</b> , redn. of)			

L2 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 1981:572439	CAPLUS
DN 95:172439	
TI <b>Water-in-hydrocarbon emulsions</b>	
PA Unilever N. V., Neth.	
SO Neth. Appl., 17 pp.	
CODEN: NAXXAN	
DT Patent	
LA Dutch	
IC C10L001-32; B01F017-00	
CC 51-9 (Fossil Fuels, Derivatives, and Related Products)	
FAN.CNT 1	

AN 1981:572439 CAPLUS

DN 95:172439

TI **Water-in-hydrocarbon emulsions**

PA Unilever N. V., Neth.

SO Neth. Appl., 17 pp.

CODEN: NAXXAN

DT Patent

LA Dutch

IC C10L001-32; B01F017-00

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>NL 7903961</u>	A	19801125	<u>NL 1979-3961</u>	19790521
<u>US 4395266</u>	A	19830726	<u>US 1980-150827</u>	19800519
<u>EP 21471</u>	A1	19810107	<u>EP 1980-200472</u>	19800520
<u>EP 21471</u>	B1	19820324		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
<u>AT 779</u>	E	19820415	<u>AT 1980-200472</u>	19800520
<u>CA 1130695</u>	A1	19820831	<u>CA 1980-352238</u>	19800520
<u>JP 56036591</u>	A2	19810409	<u>JP 1980-67695</u>	19800521
<u>JP 58058392</u>	B4	19831224		
<u>PRAI NL 1979-3961</u>		19790521		
<u>EP 1980-200472</u>		19800520		

AB Heating was used to dissolve 0.3% of rape oil fatty acid diamide of ethylenediamine ( stabilizer) and 0.3% of diammonium soap of rape oil fatty acid or of safflower oil monoglyceride **surfactant** in petroleum distillate (40-135°). Then 9 parts of the distillate was emulsified with 1 part of H2O. The emulsion remained stable for 24 h, but not when the stabilizer or the **surfactant** was used alone. The emulsions were used as **fuels**.

ST gasoline emulsion **surfactant** stabilizer; diesel **fuel** emulsion **surfactant** stabilizer; hydrocarbon oil emulsion **surfactant** stabilizer; amide stabilizer **fuel** emulsion; soap stabilizer **fuel** emulsion; **glyceride** stabilizer **fuel** emulsion

IT **Fuels****Fuels, diesel**(detergents and stabilizers for **water** emulsion base, ethylenediammonium fatty acids derivs. and safflower-oil monoglycerides as)IT **Fuel** oil additives

Gasoline additives

(detergent-stabilizers, **water** emulsions, ethylenediammonium fatty acid **glycerides** and safflower-oil monoglycerides)

IT Amides, uses and miscellaneous

RL: USES (Uses)

(di-, fatty, stabilizers, for oil-**water fuel** emulsions)IT **Glycerides**, uses and miscellaneous

RL: USES (Uses)

(safflower-oil mono-, detergents, for oil-**water** emulsion **fuels**)IT 107-15-3D, fatty acid salts

RL: USES (Uses)

(stabilizers, for oil-**water fuel** emulsions)

L2 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 1980:498316	CAPLUS
DN 93:98316	

AN 1980:498316 CAPLUS

DN 93:98316

h ebc g cg b cg

eb

TI Stabilized compositions for oil-water mixtures  
 PA Farsan Enterprises Ltd., UK  
 SO Belg., 13 pp.  
 CODEN: BEXXAL  
 DT Patent  
 LA French  
 IC B01F; C10L  
 CC 51-9 (Fossil Fuels, Derivatives, and Related Products)  
 Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 880069	A1	19800317	BE 1979-198133	19791116
	IL 58705	A1	19820228	IL 1979-58705	19791113
	BR 7907449	A	19800923	BR 1979-7449	19791114
	AU 7952832	A1	19800522	AU 1979-52832	19791115
	NL 7908387	A	19800520	NL 1979-8387	19791116
	DE 2946277	A1	19800604	DE 1979-2946277	19791116
	FR 2441656	A1	19800613	FR 1979-28319	19791116
	JP 55108493	A2	19800820	JP 1979-148742	19791116
	ZA 7906185	A	19801126	ZA 1979-6185	19791116
	CA 1114596	A1	19811222	CA 1979-340064	19791116
	PL 125046	B1	19830331	PL 1979-219669	19791116
	SU 1230470	A3	19860507	SU 1979-2847819	19791116
	GB 2039459	A	19800813	GB 1979-39934	19791119
	GB 2039459	B2	19830413		
	US 4266943	A	19810512	US 1979-95408	19791119
PRAI	GB 1978-45082		19781117		

AB An oil-sol. Mg salt (e.g., a naphthenate; 4.5-9.2%) and an anionic surfactant (e.g., a sulfonate; 1.4-3.0%) are dissolved in a light paraffin oil, the soln. being added to a mixt. of 4-9% ferrocene [102-54-5] in oil with 0-12% BzOH [65-85-0] and a combustible emulsifier, e.g., a mono-, di-, or triglyceride of a C12-20 acid. The combination forms a stabilizing mixt. which is added simultaneously with water to fuel oil at ~30° with vigorous stirring. The process is intended for emulsification of oil and water for use as fuel.

ST fuel oil emulsion stabilizer; magnesium naphthenate fuel emulsion; sulfonate naphthenate fuel emulsion; ferrocene fuel emulsion stabilizer; benzoate fuel emulsion stabilizer; glyceride fuel emulsion stabilizer; fat fuel emulsion stabilizer

IT Fuel oil  
 (aq. emulsions, stabilization of)

IT Glycerides, uses and miscellaneous  
 RL: USES (Uses)  
 (emulsifying agents, for fuel oils and water,  
 stabilizing agents in combination with)

IT Fuels  
 (emulsions, stabilizing agents for, compn. and manuf. of)

IT Stabilizing agents  
 (for aq. fuel-oil emulsions, compn. and manuf. of)

IT Naphthenic acids, compounds  
 RL: USES (Uses)  
 (magnesium salts, stabilizing agents contg., for aq. fuel-oil emulsions)

IT Surfactants  
 (sulfonates, stabilizing agents contg. for aq. fuel-oil emulsions)

IT Fuel oil additives  
 (stabilizers, for aq. emulsions, compn. and manuf. of)

IT 65-85-0, uses and miscellaneous 102-54-5 7439-95-4D, salts with naphthenic acids  
 RL: USES (Uses)  
 (stabilizing agents contg., for aq. fuel-oil emulsions)

L2 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1977:587062 CAPLUS  
 DN 87:187062  
 TI Novel microemulsions  
 IN Piotrowski, Alfred B.  
 PA Mobil Oil Corp., USA  
 SO U.S., 2 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC C10L001-32  
 NCL 044051000  
 CC 51-6 (Fossil Fuels, Derivatives, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4046519	A	19770906	US 1975-627725	19751031
PRAI	US 1975-627725		19751031		

AB Microemulsions of gasoline, MeOH [67-56-1], and H<sub>2</sub>O, useful as motor fuels, are prep. with blends of surfactants having HLB value 3-4.5. Thus, to 94 mL gasoline is added ~1 g blend, HLB value 4, of 9 parts oleic acid monoglyceride [25496-72-4] and diglyceride [25637-84-7] and 1 part N,N-bis(2-hydroxyethyl)stearylamine oxide [14048-77-2]. Adding 5 mL MeOH and, in a blender, 1 mL H<sub>2</sub>O gives a homogeneous clear dispersion which remains clear at room temp.

ST gasoline emulsion motor fuel; methanol gasoline emulsion fuel; emulsifier gasoline methanol water; glyceride oleic acid emulsifier; amine oxide emulsifier

IT Gasoline

RL: USES (Uses)  
 (microemulsions with methanol and water, for fuels, emulsifiers for)

IT Emulsifying agents  
 (oleic acid glycerides and amine oxides, for gasoline-methanol-water microemulsions for fuels)

IT 14048-77-2 25496-72-4 25637-84-7

RL: USES (Uses)  
 (emulsifiers, for gasoline-methanol-water microemulsion fuels)

IT 7732-18-5, uses and miscellaneous

RL: USES (Uses)  
 (microemulsions with gasoline and methanol, for fuels, emulsifiers for)

IT 67-56-1, uses and miscellaneous

RL: USES (Uses)  
 (microemulsions with gasoline and water, for fuels, emulsifiers for)

L2 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1972:16295 CAPLUS  
 DN 76:16295  
 TI Hydrocarbon oil-containing gelled aqueous inorganic oxidizer salt explosives having improved stability to syneresis  
 IN Young, Herbert L.  
 PA Hercules Inc.  
 SO U.S., 6 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC C06B

NCL 149041000  
 CC 50 (Propellants and Explosives)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3617406	A	19711102	US 1969-843805	19690722
PRAI	US 1969-843805		19690722		

AB Manuf. is described of gelled inorg.-oxidizer salt explosives of the aq. slurry type contg. an oil as **fuel** and having improved syneresis stability. The hydrocarbon oil is mixed as an oil-in-H2O emulsion maintained by ≥1 nonionic acyclic-type emulsifying agent, e.g. poly(oxyethylene) esters, poly(oxyethylene) alcs., and poly(oxyethylene) ethers, having a hydrophile-lipophile balance (HLB) of 15-20. This slurry contains crosslinkable galactomannan gum as a gelation agent and a crosslinking agent therefor in a wt. ratio of 30-70:1 comprising 1-3 wt. % of the finished explosive. K4Sb2O7 is a preferred crosslinking agent. Preferred galactomannan gums are guar and locust bean gums. This **surfactant** is dissolved in 25/50% of the **water** to be used and oil is added with stirring and then emulsified by passing through a homogenizer. NH4NO3 plus a small proportion of NH4 sulfamate (aeration accelerator) and most of the rest of the **water** are added. Fumaric acid is added to adjust the pH to 2.5-4. Dry guar gum is dispersed in dry NaNO3 and K4Sb2O7 and NaNO2 are dispersed in the remaining **water**. The NaNO3-guar gum and the NH4NO3-H2O-NH4 sulfamate mixt. are mixed at 80-90°F. The **fuel**-H2O emulsion is added with agitation. The K4P2O7-NaNO2 mixt. is added with agitation for 10-15 min. The final slurry mixt., due to initial hydration of the guar gum, is stable to settling of the ingredients while standing, but is still readily pumpable, during which it can be pumped for completion of crosslinking to form a gelled compn. contg. the **fuel** oil uniformly dispersed as droplets of ≤25 μ and stable to syneresis over prolonged periods. After ~1 hr, the crosslinking is complete and the compn. is ready for detonation. Three formulations differing only in degree of aeration and hence sp. gr. (1.05, 1.20, and 1.25) were prepd. from H2O 16.0, NH4NO3 61.0, NaNO2 16.0, no. 2 **fuel** oil 5.0, a poly(oxyethylene)lauryl ether (HLB 16.9) 0.05, guar gum 1.5, K4P2O7 0.023, NH4 sulfamate 0.33, NaNO2 0.10, and fumaric acid as required. They had an O balance of +0.3. The mixing temp. was 80°F, the slurries had pH's of 4.7, 3.9, and 3.9, resp., after 24 hr, and the gels were firm after 24 hr. The compns. had similar gel stabilities and high resistance to syneresis, compared with ethylene glycol-contg. slurries. Emulsifiers having a cyclic structure failed to sustain low syneresis.

ST explosives syneresis resistance; **fuel** oil explosives; inorg salt slurry explosives; emulsifier slurry explosives

IT Hydrocarbon oils  
 RL: USES (Uses)  
 (gelling of emulsions of, with nitrates for syneresis prevention in explosives)

IT Explosives  
 (nitrate, gelling with hydrocarbon oil emulsions for syneresis prevention)

IT Emulsifying agents  
 (polyoxyethylene, for hydrocarbon oil **fuels** for gelling with nitrates in explosives)

IT Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, fatty glyceride deriv.  
 RL: USES (Uses)  
 (emulsifying agents, for hydrocarbon oil **fuels** for nitrate explosive gels with low syneresis)

IT 29638-69-5  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinking agents, in gelling of hydrocarbon oil **fuel** emulsions with nitrates for explosives with low syneresis)

IT 1338-39-2 1338-43-8 9002-92-0 9004-99-3 9005-64-5 9005-65-6  
9005-67-8 9005-70-3 61791-12-6

RL: USES (Uses)

(emulsifying agents, for hydrocarbon oil fuels for nitrate explosive gels with low syneresis)

IT 6484-52-2, uses and miscellaneous 7631-99-4, uses and miscellaneous

RL: USES (Uses)

(gelling of, with hydrocarbon oil emulsions for explosives with low syneresis)

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

80.74

80.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-11.07

-11.07

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Sep 12, 2003 (20030912/UP).

=> file caplus wpids

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.68

82.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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-11.07

FILE 'CAPLUS' ENTERED AT 11:26:51 ON 20 SEP 2003

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FILE 'WPIDS' ENTERED AT 11:26:51 ON 20 SEP 2003

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=> s tall oil and coal

L3 230 TALL OIL AND COAL

=> d his

(FILE 'HOME' ENTERED AT 11:08:40 ON 20 SEP 2003)

FILE 'WPIDS, CAPLUS' ENTERED AT 11:08:59 ON 20 SEP 2003

L1 1626 S WATER AND SURFACTANT AND GLYCERIDE

L2 24 S L1 AND (FUEL OR COAL)

FILE 'STNGUIDE' ENTERED AT 11:10:11 ON 20 SEP 2003

FILE 'CAPLUS, WPIDS' ENTERED AT 11:26:51 ON 20 SEP 2003

L3 230 S TALL OIL AND COAL

=> s 13 and l1

L4 2 L3 AND L1

h

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g cg b

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eb

=&gt; d 14 1-2 all

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609731 CAPLUS  
 DN 139:151702  
 TI Methods of increasing flotation rate  
 IN Yoon, Roe-Hoan  
 PA USA  
 SO U.S. Pat. Appl. Publ., 12 pp., Division of U.S. Ser. No. 573,441.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM B03D001-14  
 NCL 209164000  
 CC 48-1 (Unit Operations and Processes)  
 Section cross-reference(s): 49

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003146134	A1	20030807	US 2002-218979	20020814
PRAI	US 2000-573441	A3	20000516		

AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation were developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles used in flotation. The hydrophobicity-enhancing reagents include low HLB **surfactants**, naturally occurring lipids, modified lipids, and hydrophobic polymers. These methods can greatly increase the rate of flotation for the particles that are usually difficult to float, such as ultrafine particles, coarse particles, middlings, and the particles that do not readily float in the **water** contg. large amts. of ions derived from the particles. New collectors for the flotation of phosphate minerals are disclosed.

ST flotation collector hydrophobic nonionic polymer **surfactant** HLB phosphate; nonionic **surfactant** fatty glycol **glyceride** ester amide amine lipid

IT Hydrophile-lipophile balance value  
 (<15; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkoxylated, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (animal; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polar solvents  
 (aprotic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (chloro; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents  
 (collectors; methods of increasing flotation rate with hydrophobic neutral additives)

IT Lanolin  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (derivs.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Petroleum products

h eb c g cg b cg

eb



(distillates; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrophobicity  
(enhanced by additives; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fatty acids, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT Glycols, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ethers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Alcohols, uses  
Amines, uses  
Fatty acids, uses  
Glycerides, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bituminous coal  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(fines; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(fish; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents  
(frothers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(glyceryl; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(glycol; methods of increasing flotation rate with hydrophobic neutral additives)

IT Glycerides, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(hydrogenated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Particles  
(hydrophobic and hydrophilic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polymers, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(hydrophobic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation  
(increased rate of; methods of increasing flotation rate with hydrophobic neutral additives)

IT Clays, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(kaolinitic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Esters, uses  
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(lard, Et esters; methods of increasing flotation rate with hydrophobic

neutral additives)

IT Hydrocarbon oils  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (light oils; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (lower, aliph.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Linear low density polyethylenes  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (metallocene-catalyzed; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bubbles  
 Diesel fuel  
 Ionic strength  
 Milling (size reduction)  
 Slurries  
 Solvents  
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT Aromatic hydrocarbons, uses  
 Diglycerides  
 Ethers, uses  
 Fatty acids, uses  
 Glycerides, uses  
 Glycols, uses  
 Kerosene  
 Ketones, uses  
 Ligroine  
 Lime (chemical)  
 Monoglycerides  
 Naphtha  
 Polysilanes  
 Soybean oil  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT Anthracite  
 Coal, processes  
 Copper ores, processes  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT Lipids, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (naturally occurring and modified; methods of increasing flotation rate with hydrophobic neutral additives)

IT Surfactants  
 (nonionic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Minerals, processes  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
 (phosphate; methods of increasing flotation rate with hydrophobic neutral additives)

IT Copper ores, processes  
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
 (porphyry; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses

- RL: MOA (Modifier or additive use); USES (Uses)  
(reaction products from **glycerides**; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Glycerides**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(reaction products from thioesterification; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Alcohols**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(short-chain, C1-7; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Polymers**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(silicon-contg.; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fatty acids**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(**tall-oil**; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Particles**  
(ultrafine; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fats and Glyceridic oils**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(vegetable, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fats and Glyceridic oils**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(vegetable; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **64-19-7**, Acetic acid, uses  
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)  
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT **50-99-7D**, Glucose, esters of **56-23-5**, Carbon tetrachloride, uses  
**57-50-1D**, Sucrose, esters of **67-68-5**, Dimethyl sulfoxide, uses  
**68-12-2**, Dimethylformamide, uses **75-15-0**, Carbon disulfide, uses  
**107-97-1D**, Sarcosine, derivs. **872-50-4**, N-Methylpyrrolidone, uses  
**1336-21-6**, Ammonium hydroxide **1338-43-8**, Span 80 **1344-09-8**, Sodium silicate **2720-73-2**, Potassium amyl xanthate **5116-94-9** **7664-38-2D**, Phosphoric acid, esters **9002-88-4D**, Polyethylene, derivs. **9004-73-3D**, Poly(methylhydrosiloxane), derivs. **12441-09-7D**, Sorbitan, derivs. **572924-33-5**, Shellfloat 758 **572924-40-4**, Aero 6973  
RL: MOA (Modifier or additive use); USES (Uses)  
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT **1308-56-1P**, Chalcopyrite, processes **1309-56-4P**, Molybdenite **1314-56-3P**, Diphosphorus pentaoxide (P2O5), processes **7782-42-5P**, Graphite, processes **14807-96-6P**, Talc, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)  
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT **1317-70-0**, Anatase **1332-37-2**, Iron oxide, processes  
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)  
(methods of increasing flotation rate with hydrophobic neutral additives)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

	Full Text	Citing References
AN	2003:609679 CAPLUS	
DN	139:135902	

h eb c g cg b cg

eb

TI **Tall-oil** pitch-based and **glyceride**-based chemical change agent for  
production of solid **coal**-based synthetic fuel briquets  
IN Giampa, Vince M.; Dubiel, John T.; Lyons, Orville  
PA Ceredo Liquid Terminal Inc., USA  
SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXXO

DT Patent

LA English

IC ICM C10L005-14

ICS C10L005-44; C10L005-16

NCL 044565000; 044577000

CC 51-15 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003145516	A1	20030807	US 2002-68285	20020205
PRAI	US 2002-68285		20020205		

AB A chem. change agent for prepn. of **coal**-based synthetic fuel briquets consists of **water** 0-70, **tall oil** and **tall-oil** pitch 0-60, C16-18-**glycerides** 0.25-40, and **surfactants** 0.25-4 wt.%, with 50-200 cP, sulfur content <0.2 wt.%, and closed cup flash point >200°, and can be stable when stored as an emulsion at 21-71°. The chem. change agent is produced by first heating a **tall-oil** pitch to >93° and adding **water**, **glycerides**, and **surfactant** to form an emulsion. The **coal**-based synthetic fuel briquets are then prepd. from 98.8-99.5 wt.% **coal** and 0.5-1.2 wt.% of the above emulsion, followed by pressing the mixt. to briquets.

ST **coal** briquet synthetic fuel **tall oil** pitch; **glyceride** **tall oil** pitch **coal** synthetic fuel

IT **Glycerides**, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(C16-18, emulsions; **tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

IT Fuel briquets

(**coal**-based solids; **tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

IT Corn oil

Cottonseed oil

Palm oil

Soybean oil

**Tall oil**

**Tall oil** pitch

RL: TEM (Technical or engineered material use); USES (Uses)  
(emulsions; **tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

IT Fuels

(synthetic, solid briquets; **tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

IT **Surfactants**

(**tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

IT Fats and Glyceridic oils, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
(vegetable, emulsions; **tall-oil** pitch-based and **glyceride**-based chem. change agent for prodn. of solid **coal**-based synthetic fuel briquets)

=> s tall oil and glyceride  
L5 208 TALL OIL AND GLYCERIDE

=> s 15 and (water or emulsion)  
L6 68 L5 AND (WATER OR EMULSION)

=> d his

(FILE 'HOME' ENTERED AT 11:08:40 ON 20 SEP 2003)

FILE 'WPIDS, CAPLUS' ENTERED AT 11:08:59 ON 20 SEP 2003  
L1 1626 S WATER AND SURFACTANT AND GLYCERIDE  
L2 24 S L1 AND (FUEL OR COAL)

FILE 'STNGUIDE' ENTERED AT 11:10:11 ON 20 SEP 2003

FILE 'CAPLUS, WPIDS' ENTERED AT 11:26:51 ON 20 SEP 2003  
L3 230 S TALL OIL AND COAL  
L4 2 S L3 AND L1  
L5 208 S TALL OIL AND GLYCERIDE  
L6 68 S L5 AND (WATER OR EMULSION)

=> s 16 not 12  
L7 65 L6 NOT L2

=> d 17 1-65 ti

L7 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Process for the enzymic generation and recovery of fatty acid hydroperoxides

L7 ANSWER 2 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Stain resistant treatment for porous substrates

L7 ANSWER 3 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Compositions and method for targeted controlled delivery of active ingredients and sensory markers onto hair, skin, and fabric

L7 ANSWER 4 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Manufacture of aqueous dispersions of alkyd resins using internal emulsifiers

L7 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Chlorine-free extreme-pressure additives for vegetable oil-based, especially soybean oil-based, metalworking lubricating oils

L7 ANSWER 6 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Manufacture of monoglycerides without using catalysts and their use as oiliness improvers

L7 ANSWER 7 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Process for producing carotenoid emulsion

L7 ANSWER 8 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Effects of wood polysaccharides on pitch deposition

L7 ANSWER 9 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Article having a transferable breathable skin care composition thereon

L7 ANSWER 10 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Stable emulsions from gelled overbased substrates with surfactants and aqueous liquids

L7 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Lubricant for drilling fluids

L7 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Invert emulsion drilling fluids having negative alkalinity

L7 ANSWER 13 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Preparation of biodegradable polymer dispersions and their use

L7 ANSWER 14 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Compositions and method for simultaneously improving the flexural bond strength and water repellency of mortar, and cementitious mixtures containing the compositions

L7 ANSWER 15 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI An oil-in-water emulsion for use on human skin for cleansing, preserving or improving the condition of the skin

L7 ANSWER 16 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Solventless hydrophobic biodegradable polymer dispersions, their manufacture and uses

L7 ANSWER 17 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Water-based polymer dispersion adhesives containing natural resins and oils

L7 ANSWER 18 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Polymeric industrial material based on swellable natural material and its manufacture and use

L7 ANSWER 19 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Aqueous lecithin-based release aids and methods of using the same

L7 ANSWER 20 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Lipid-based composition containing diacylglycerol, phospholipid, polar liquid and biologically active material

L7 ANSWER 21 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Ammonium nitrate **emulsion** explosive composition variations containing sodium or potassium nitrate, industrial oil or mazut, sodium nitrite, and, as emulsifier, C14-24 or **tall-oil glycerides**, and, optionally, as sensitizer, microspheres of resins, glass, or expanded polystyrene, or polystyrene and aluminum

L7 ANSWER 22 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Flotation deinking of media printed with hydrophilic flexographic inks

L7 ANSWER 23 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Overbased carboxylates and gels

L7 ANSWER 24 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Confectionery compressed tablets with controlled flavor release

L7 ANSWER 25 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Stable microbicidal compositions containing TCMTB

L7 ANSWER 26 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Cationic emulsifiers and their use in making aqueous bituminous **emulsions** and pavement-sealing **emulsion**-aggregate slurries

L7 ANSWER 27 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Additives to polyester tire yarn overfinish to reduce dip penetration

L7 ANSWER 28 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Homogeneous stabilizer compositions for vinyl halide polymers

L7 ANSWER 29 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Composition for impregnating and staining of wood

L7 ANSWER 30 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Additives for polyester tire yarn overfinishes to reduce dip penetration

L7 ANSWER 31 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Liquid soap

L7 ANSWER 32 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Defoaming agents for processing pulp

L7 ANSWER 33 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Phenolic resins

L7 ANSWER 34 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Acrylamide-modified **water**-thinned coating materials

L7 ANSWER 35 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Composition for treating leather

L7 ANSWER 36 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Control of oils floating on **water**

L7 ANSWER 37 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Lightweight, rigid asbestos-cement products

L7 ANSWER 38 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Polyurethane foam

L7 ANSWER 39 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Heat sealable poly(vinylidene chloride) film coated with a fatty acid salt

L7 ANSWER 40 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Polyurethane foam

L7 ANSWER 41 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Rigid polyurethane foams

L7 ANSWER 42 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI **Water emulsion** type printing inks

L7 ANSWER 43 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References



TI Polyester coating compositions

L7 ANSWER 44 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Reforming polymerization of **tall-oil glyceride** and its mixtures with cuttlefish oils by silent electrical discharge

L7 ANSWER 45 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Fermentation of long-chain compounds by *Torulopsis magnoliae*. II. Factors influencing production of hydroxy fatty acid glycosides

L7 ANSWER 46 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI **Water**-base drilling muds

L7 ANSWER 47 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Cyclic aluminum oxide acylates, alkoxides, and phenoxides

L7 ANSWER 48 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Fractionation of oils by selective extraction

L7 ANSWER 49 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Oil-modified alkyd-resin mixtures

L7 ANSWER 50 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Use of Bulgarian **tall oil** in paint and varnish making

L7 ANSWER 51 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Copolymers of vinyl aromatic compound, fatty acid ester of epoxy resin, and a vegetable oil

L7 ANSWER 52 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Coating compositions from fatty acids

L7 ANSWER 53 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Demulsification agents for treating petroleum **emulsions**

L7 ANSWER 54 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI Polyamides

L7 ANSWER 55 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing  
References

TI **Tall oil** fat acids with regard to chemistry and paint technology

- L7 ANSWER 56 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Preparation of a fat composition, useful as a food product, comprises direct interesterification of a sterol raw material with a triglyceride raw material.
- L7 ANSWER 57 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Organic molybdenum complexes used as multifunctional additives for lubricants, e.g. lubricating oil for automobiles, comprises reaction product of fatty oil(s), mono-alkylated alkylene diamine(s) and molybdenum source.
- L7 ANSWER 58 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Compound for low odor paper products comprises a **water** soluble/dispersible imidazoline having low odor.
- L7 ANSWER 59 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Invert **emulsion** drilling fluid with negative alkalinity for drilling subterranean wells comprises an oleaginous phase, a non-oleaginous phase and an emulsifying agent.
- L7 ANSWER 60 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Partial **glycerides** of fatty acid derivatives are used as lubricant in borehole flushing fluids containing **water** and separate oil phase.
- L7 ANSWER 61 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Production of an amide defoamer composition using a high energy, in-line mixer having a rotor-stator assembly for **water** based systems.
- L7 ANSWER 62 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Aq. polyurethane dispersion with epoxidised fatty acid ester - ring-opened with carboxylic acid as poly ol component, prepn. and use in dressing leather.
- L7 ANSWER 63 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Reducing dip penetration in polyester yarns for tyre cords - by including paraffin wax in specified prior art over-finish **emulsions**.
- L7 ANSWER 64 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Detergent compsn. with improved washing power - contg. organic surfactant, synthetic zeolite builder and **water**-soluble salt of ethylene -unsatd. di carboxylic acid copolymer and olefin.
- L7 ANSWER 65 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
 TI Agglomerating and removal of oil slicks - using a compsn. comprising soln. of drying oil in alcohol, ester, ketone or ether.

=> d 17 5 11 12 15 46 all

- L7 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN	2003:202749	CAPLUS
DN	138:223992	
TI	Chlorine-free extreme-pressure additives for vegetable oil-based, especially soybean oil-based, metalworking lubricating oils	
IN	King, James P.; Canter, Neil	
PA	United Soy Bean Board, USA	
SO	PCT Int. Appl., 32 pp. CODEN: PIXXD2	
DT	Patent	
LA	English	
IC	ICM C10M105-38 ICS C10M169-06; C10M135-02; C10M137-08	

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CC 51-8 (Fossil Fuels, Derivatives, and Related Products)  
 Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>PI</u>	<u>WO 2003020855</u>	A1	20030313	<u>WO 2002-US25514</u>	20020813
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRAI US 2001-316971P P 20010905

AB A vegetable oil-based lubricating oil consists of a vegetable oil and a phosphorus-based polar chlorine-free extreme pressure additive, such that the compn. has a load wear index of  $\geq 40$  and a weld point of  $\geq 315$  kg, both measured in a four-ball test (ASTM D 2783), and a Falex extreme-pressure failure load of  $\geq 4500$  lbs (ASTM D 3233). Suitable vegetable oils include soybean oil, coconut oil, rape oil, canola oil, peanut oil, sunflower oil, and crambe oil (preferably soybean oil). The polar non-chlorine extreme-pressure additives include amine phosphates, alkylamine or alkanolamine phosphate salts, organophosphites, triethanolamine, ethanolamine, thioesters, sulfurized fatty esters, sulfurized hydrocarbons, sulfurized **glycerides**, and alkyl polysulfides. The compns. can also contain other additives, such as thickeners, surfactants or coupling agents, antioxidants, dispersants, corrosion inhibitors, and emulsifiers. A suitable general compn. is vegetable oil 5-90, the above extreme-pressure additives 3-20, **water** 10, coupling agents  $<10$ , corrosion inhibitors 5-40, biocides  $<10$ , emulsifiers 10-50, antioxidants  $<6$ , and defoamers  $<5$  wt.%.  
ST **glyceride** metalworking fluid extreme pressure additive; soybean oil metalworking fluid extreme pressure additive; nonchlorine extreme pressure additive soybean oil metalworking  
IT Soybean oil  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (Me ester, Soygold 1000, base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)  
IT Amides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (N-(hydroxyethyl), surfactants and coupling agents; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)  
IT Polysulfides  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (alkyl, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)  
IT Lubricating oil additives  
 (antioxidants, metalworking, for vegetable base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)  
IT Amines, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (arom., antioxidants; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)  
IT Canola oil

Coconut oil  
 Glycerides, uses  
 Peanut oil  
 Rape oil  
 Soybean oil  
 Sunflower oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (base oil; chlorine-free extreme-pressure additives for vegetable  
 oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Corrosion inhibitors  
 (chlorine-free extreme-pressure additives for vegetable oil-based, esp.  
 soybean oil-based, metalworking lubricating oils)

IT Phosphorus acids  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (compds. with amides; chlorine-free extreme-pressure additives for  
 vegetable oil-based, esp. soybean oil-based, metalworking lubricating  
 oils)

IT Amides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (compds. with phosphorus acids, extreme-pressure additives;  
 chlorine-free extreme-pressure additives for vegetable oil-based, esp.  
 soybean oil-based, metalworking lubricating oils)

IT Glycerides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (crambe, base oil; chlorine-free extreme-pressure additives for  
 vegetable oil-based, esp. soybean oil-based, metalworking lubricating  
 oils)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters, extreme-pressure additives; chlorine-free extreme-pressure  
 additives for vegetable oil-based, esp. soybean oil-based, metalworking  
 lubricating oils)

IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters, sulfurized, extreme-pressure additives; chlorine-free  
 extreme-pressure additives for vegetable oil-based, esp. soybean  
 oil-based, metalworking lubricating oils)

IT Polyoxyalkylenes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (esters, surfactants and coupling agents; chlorine-free  
 extreme-pressure additives for vegetable oil-based, esp. soybean  
 oil-based, metalworking lubricating oils)

IT Lubricating oil additives  
 (extreme-pressure, non-chlorine, metalworking, for vegetable base oils;  
 chlorine-free extreme-pressure additives for vegetable oil-based, esp.  
 soybean oil-based, metalworking lubricating oils)

IT Phenols, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (hindered, antioxidants; chlorine-free extreme-pressure additives for  
 vegetable oil-based, esp. soybean oil-based, metalworking lubricating  
 oils)

IT Lubricating oil additives  
 (metalworking oil additives; chlorine-free extreme-pressure additives  
 for vegetable oil-based, esp. soybean oil-based, metalworking  
 lubricating oils)

IT Lubricating oils  
 (metalworking; chlorine-free extreme-pressure additives for vegetable  
 oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Soybean oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (oxidized, base oil; chlorine-free extreme-pressure additives for  
 vegetable oil-based, esp. soybean oil-based, metalworking lubricating  
 oils)

IT Castor oil

- Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (oxidized, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Polyesters, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (polymers with styrene, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT **Glycerides**, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (polymers, telomers, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (soya, Me esters, base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Alkenes, uses  
**Glycerides**, uses  
 Hydrocarbons, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (sulfurized, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fatty acids, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (tall-oil; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Amines, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (tallow alkyl; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Lubricating oil additives  
 (thickeners, metalworking, for vegetable base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Butadiene rubber, uses  
 Styrene-butadiene rubber, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Esters, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (thio, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (vegetable, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fats and Glyceridic oils, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (vegetable, oxidized, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 123-56-8D, Succinimide, derivs.  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (antioxidants; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

- IT 9003-17-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(butadiene rubber, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 1310-58-3, Potassium hydroxide, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 501033-77-8, Gateway CP 105  
RL: MOA (Modifier or additive use); USES (Uses)  
(corrosion inhibitor; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 4719-04-4 80893-25-0, Petromix 9 121273-59-4, M 28B  
RL: MOA (Modifier or additive use); USES (Uses)  
(emulsifier; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 215501-37-4 500995-66-4  
RL: MOA (Modifier or additive use); USES (Uses)  
(extreme-pressure additive; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 7664-38-2D, Phosphoric acid, compds. with alkyl amines and alkanolamines  
7664-38-2D, Phosphoric acid, esters 10017-56-8, Triethanolamine phosphate 13598-36-2D, Phosphonic acid, alkyl, alkanolamine esters 25496-72-4, Glycerol monooleate 29868-05-1, Ethanolamine phosphate 34655-69-1, Dibutyl amine phosphate 41035-89-6 67952-32-3 126340-31-6, Vanlube 672 501033-37-0, Desilube 77 501033-50-7, Additin RC 2515 501033-51-8, Additin RC 2526 501033-52-9, Lubrizol 5340L 501033-75-6, Lubrophos LL 550 501033-76-7, Elco 670  
RL: MOA (Modifier or additive use); USES (Uses)  
(extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 9003-55-8  
RL: MOA (Modifier or additive use); USES (Uses)  
(styrene-butadiene rubber, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 9005-65-6, Tween 80 9016-45-9, Igepal CO  
RL: MOA (Modifier or additive use); USES (Uses)  
(surfactant; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 57-55-6, Propylene glycol, uses 25322-68-3D, Polyethylene glycol, esters 37318-79-9, Sorbitan oleate  
RL: MOA (Modifier or additive use); USES (Uses)  
(surfactants and coupling agents; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 79-41-4D, Methacrylic acid, alkyl esters, polymers 9003-27-4, Polyisobutylene 9010-79-1, Ethylene-propylene copolymer  
RL: MOA (Modifier or additive use); USES (Uses)  
(thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Camenzind; US 5320764 A 1994 CAPLUS
- (2) Fletschinger; US 20020016266 A1 2002
- (3) Griffith; US 5552068 A 1996 CAPLUS
- (4) Kuwamoto; US 4637885 A 1987 CAPLUS
- (5) Watson; US 2882228 A 1959 CAPLUS

L7 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

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Full Text	Citing References
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AN 2000:335754 CAPLUS  
 DN 132:336696  
 TI Lubricant for drilling fluids  
 IN Mueller, Heinz; Herold, Claus-Peter; Bongardt, Frank; Herzog, Nadja; Von Tapavicza, Stephan  
 PA Cognis Deutschland G.m.b.H., Germany  
 SO Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 IC ICM C09K007-00  
 ICS C10M105-40; E21B021-00  
 CC 51-2 (Fossil Fuels, Derivatives, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DE 19852971	A1	20000518	DE 1998-19852971	19981117
	WO 2000029502	A1	20000525	WO 1999-EP8532	19991106
	W: AU, BR, CA, NO, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	BR 9915438	A	20010807	BR 1999-15438	19991106
	EP 1137736	A1	20011004	EP 1999-955958	19991106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AU 756915	B2	20030123	AU 2000-12696	19991106
	NO 2001002430	A	20010702	NO 2001-2430	20010516
PRAI	DE 1998-19852971	A	19981117		
	WO 1999-EP8532	W	19991106		

AB Partial glycerides of predominantly unsatd. C16-24 fatty acids, optionally mixed with anionic surfactants, are used as a lubricant for drilling fluids which contain water and optionally a sep. oil phase. The partial glycerides do not generate harmful foams, are nontoxic, are biodegradable, and can be used at low temps.

ST glyceride partial lubricant drilling fluid

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (C12-24, sulfonated; in lubricant for drilling fluids)

IT Glycerides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (C16-24 unsatd., fatty acid; lubricant for drilling fluids)

IT Surfactants  
 (anionic; in lubricant for drilling fluids)

IT Drilling fluids  
 (partial glycerides as lubricant for)

IT Castor oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (sulfated; lubricant for drilling fluids)

IT Soybean oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (sulfonates; lubricant for drilling fluids)

IT Glycerides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (tall-oil, mono- and di-; lubricant for drilling fluids)

L7 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2000:335496 CAPLUS  
 DN 132:350007  
 TI Invert emulsion drilling fluids having negative alkalinity

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IN Patel, Arvind D.  
 PA M-I L.L.C., USA  
 SO PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C09K007-06  
 CC 51-2 (Fossil Fuels, Derivatives, and Related Products)  
 FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000027945	A1	20000518	WO 1999-US26639	19991112
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1129148	A1	20010905	EP 1999-958894	19991112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001002362	A	20010712	NO 2001-2362	20010514
PRAI	US 1998-190783	A	19981112		
	WO 1999-US26639	W	19991112		
OS	MARPAT 132:350007				
AB	An invert <b>emulsion</b> suitable for drilling subterranean wells, in particular oil and gas wells is disclosed which has neg. alky. and includes an oleaginous phase, and a non-oleaginous phase and an emulsifying agent which stabilizes the invert <b>emulsion</b> under conditions of neg. alky. The practice of the present invention permits the formulation of drilling fluids which are absent an alk. reserve and yet are suitable for drilling oil and gas wells.				
ST	invert <b>emulsion</b> drilling fluid neg alky				
IT	Acetals Esters, uses Ethers, uses RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (aliph.; invert <b>emulsion</b> drilling fluids having neg. alky.)				
IT	Fatty acids, uses RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (coco, Me esters; invert <b>emulsion</b> drilling fluids having neg. alky.)				
IT	Fatty acids, uses RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (coco, esters, C1-12 alkyl esters; invert <b>emulsion</b> drilling fluids having neg. alky.)				
IT	Amines, uses RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (hydrogenated tallow alkyl, acetates; invert <b>emulsion</b> drilling fluids having neg. alky.)				
IT	Diesel fuel Emulsifying agents (invert <b>emulsion</b> drilling fluids having neg. alky.)				
IT	Tall oil RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (invert <b>emulsion</b> drilling fluids having neg. alky.)				

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IT **Glycerides, uses**  
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
 (invert **emulsion** drilling fluids having neg. alky.)

IT Drilling fluids  
 (inverted **emulsions**; invert **emulsion** drilling fluids having neg. alky.)

IT Fatty acids, uses  
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
 (tall-oil; invert **emulsion** drilling fluids having neg. alky.)

IT 64-19-7, Acetic acid, uses 13462-86-7, Barite 184786-01-4, Versalig 269065-35-2, Ecogreen F  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (invert **emulsion** drilling fluids having neg. alky.)

IT 221902-96-1, VG Plus  
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)  
 (invert **emulsion** drilling fluids having neg. alky.)

IT 112-80-1D, Oleic acid, C1-12 alkyl esters 544-63-8D, Myristic acid, C1-12 alkyl esters 28299-33-4, Novawet 136753-47-4, VersaCoat 269065-30-7, Ecogreen P 269065-34-1, Ecogreen S 269065-57-8, EMI 545 269065-58-9, Novathin 269065-59-0, EMI 524  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (invert **emulsion** drilling fluids having neg. alky.)

IT 112-62-9, Methyl oleate 504-75-6D, Imidazoline, derivs. 10043-52-4, Calcium chloride, uses 120961-98-0, Finagreen BDMF  
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
 (invert **emulsion** drilling fluids having neg. alky.)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 11129-60-5, Manganese oxide 13397-26-7, Calcite, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (weighting agent; invert **emulsion** drilling fluids having neg. alky.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Foley, J; US 3728277 1973 CAPLUS
- (2) Henkel, K; EP 0382070 A 1990 CAPLUS
- (3) Henkel, K; EP 0382071 A 1990 CAPLUS
- (4) Henkel, K; EP 0386638 A 1990 CAPLUS
- (5) Hoeppel, R; FR 1441299 A CAPLUS

L7 ANSWER 15 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 1998:112195 CAPLUS	
DN 128:196474	
TI An oil-in-water emulsion for use on human skin for cleansing, preserving or improving the condition of the skin	
IN Hyldgaard, Jorgen; Larsen, Jimmi; Jensen, Anette Severin	
PA Plum Kemi Produktion A/S, Den.; Hyldgaard, Jorgen; Larsen, Jimmi; Jensen, Anette Severin	
SO PCT Int. Appl., 77 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM A61K007-00	
ICS A61K007-48; A61K007-50; A61K007-40; A61K007-42	
CC 62-4 (Essential Oils and Cosmetics)	
FAN.CNT 1	
PATENT NO.	KIND DATE APPLICATION NO. DATE

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PI	WO 9805294	A1	19980212	WO 1997-DK324	19970801
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DK, DK, EE, ES, FI, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9736920	A1	19980225	AU 1997-36920	19970801
	EP 915693	A1	19990519	EP 1997-933638	19970801
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9711019	A	19990817	BR 1997-11019	19970801
	CN 1226816	A	19990825	CN 1997-196982	19970801
	US 6342208	B1	20020129	US 1999-230777	19990308
PRAI	DK 1996-828	A	19960802		
	DK 1996-1465	A	19961220		
	WO 1997-DK324	W	19970801		
AB	Disclosed is an oil-in-water emulsion, esp. for use on mammalian skin, in particular on human skin, or hair in order to cleanse the skin or hair, remove dirt, etc., and/or to preserve or improve the condition of the skin, and/or to prevent or treat various skin conditions such as, e.g., dry skin, irritated skin or otherwise traumatized skin. Upon application on a skin surface and following rinsing or flushing the skin surface with a liq., the oil-in-water emulsion separates into at least two distinct phases and leaves a protective layer on the skin comprising at least a part of the oily phase. The oil-in-water emulsion also has useful properties with respect to protection of the skin against sun light and with respect to combating attack from parasites like lice, fleas and scabies on mammals such as humans, domestic animals and pets. Also disclosed is a skin-friendly lipid, namely Meadowfoam seed oil, as a therapeutic agent, and as an agent which in itself in synergistic effect with other constituents is effective against mammalian parasites, esp. from the phylum Arthropoda, and as an agent which is effective as a sunscreen or a UV-A, UV-B or UV-C filter. A skin-cleansing emulsion contained water 57.94, Na4EDTA 0.31, citric acid 0.5, MEA (99%) 2.4, KOH (46%) 0.16, palmitic acid 11.38, glycerol tricaprylate/caprate 13.82, sulfated castor oil 2.24, parabens 0.73, Tegobetain F50 (cocoamidopropyl betaine) 5.36, Meadowfoam seed triglycerides 4.47, Lutensol TO3 (C9-11 Pareth) 0.69 %.				
ST	skin cleanser emulsion meadowfoam seed oil				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(Limnanthes alba seed; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(almond; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Betaines				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(amido; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(animal; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				

IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (apricot kernel; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (avocado; oil-in-water cosmetic cleansing **emulsions**  
 for improving skin conditions)

IT Willow (Salix)  
 (bark, exts.; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Cosmetics  
 (cleansing; oil-in-water cosmetic cleansing **emulsions**  
 for improving skin conditions)

IT Balsams  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (copaiba, exts.; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Actinidia chinensis  
 Aloe barbadensis  
 Apricot (Prunus armeniaca)  
 Arnica montana  
 Bamboo  
 Bearberry  
 Beet  
 Bilberry  
 Birch (Betula)  
 Blackberry  
 Buckwheat (Fagopyrum esculentum)  
 Burdock  
 Calendula  
 Capsicum frutescens  
 Carrot  
 Centaurea cyanus  
 Cherimoya (Annona cherimola)  
 Coix lacryma-jobi  
 Coltsfoot  
 Comfrey (Symphytum)  
 Coneflower  
 Cucumber (Cucumis sativus)  
 Equisetum  
 Fennel (Foeniculum vulgare)  
 Fucus vesiculosus  
 Ginger  
 Ginkgo  
 Ginseng (Panax)  
 Guarana (Paullinia cupana)  
 Hawthorn (Crataegus monogyna)  
 Hay  
 Hop (Humulus)  
 Horse chestnut (Aesculus)  
 Hydrocotyle  
 Ivy (Hedera)  
 Jujube (Zizyphus)  
 Juniper (Juniperus communis)  
 Laminaria digitata  
 Lavender (Lavandula)  
 Lawsonia inermis  
 Lemon (Citrus limon)  
 Licorice (Glycyrrhiza)  
 Linden (Tilia)

Lithospermum officinale  
 Mallow (Malva)  
 Mango (Mangifera indica)  
 Marshmallow (Althaea officinalis)  
 Matricaria  
 Melon (plant)  
 Mimosa tenuiflora  
 Mint  
 Oak (Quercus alba)  
 Oak (Quercus robur)  
 Oyster  
 Peach (Prunus persica)  
 Peppermint (Mentha piperita)  
 Quillaja saponaria  
 Raspberry  
 Rhatany (Krameria triandra)  
 Rosemary  
 Ruscus aculeatus  
 Sage (Salvia)  
 Soapwort  
 St.-John's-wort (Hypericum)  
 Stinging nettle  
 Strawberry  
 Tea (Camellia sinensis)  
 Thyme (Thymus)  
 Viola tricolor  
 Walnut  
 Watercress  
 Witch hazel  
 (exts.; oil-in-water cosmetic cleansing emulsions  
 for improving skin conditions)  
 IT Shea tree (Butyrospermum parkii)  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (exts.; oil-in-water cosmetic cleansing emulsions  
 for improving skin conditions)  
 IT Amides, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (fatty; oil-in-water cosmetic cleansing emulsions  
 for improving skin conditions)  
 IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (fish; oil-in-water cosmetic cleansing emulsions  
 for improving skin conditions)  
 IT Wheat  
 (germ, exts.; oil-in-water cosmetic cleansing  
 emulsions for improving skin conditions)  
 IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (grape seed; oil-in-water cosmetic cleansing  
 emulsions for improving skin conditions)  
 IT Rose (Rosa)  
 (hips, exts.; oil-in-water cosmetic cleansing  
 emulsions for improving skin conditions)  
 IT Coconut oil  
 Coconut oil  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (hydrogenated; oil-in-water cosmetic cleansing  
 emulsions for improving skin conditions)  
 IT Glycerides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(long-chain; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Insect repellents  
Sunscreens  
(oil-in-water cosmetic cleansing **emulsions** for  
improving skin conditions)

IT Betaines  
Castor oil  
Cocoa butter  
Corn oil  
Cottonseed oil  
Diglycerides  
Disinfectants  
**Glycerides**, biological studies  
Jojoba oil  
Lanolin  
Linseed oil  
Monoglycerides  
Olive oil  
Palm oil  
Peanut oil  
Rape oil  
Soybean oil  
Sulfobetaines  
Sunflower oil  
Tall oil  
Vitamins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(oil-in-water cosmetic cleansing **emulsions** for  
improving skin conditions)

IT Fats and Glyceridic oils, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(poppyseed; oil-in-water cosmetic cleansing **emulsions**  
for improving skin conditions)

IT Arthropod (Arthropoda)  
Flea (Siphonaptera)  
Louse  
(repellent to; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Fatty acids, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(salts; oil-in-water cosmetic cleansing **emulsions**  
for improving skin conditions)

IT Skin, disease  
(scabies, repellent to; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Fats and Glyceridic oils, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(sesame; oil-in-water cosmetic cleansing **emulsions**  
for improving skin conditions)

IT Fats and Glyceridic oils, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(shea butter; oil-in-water cosmetic cleansing  
**emulsions** for improving skin conditions)

IT Castor oil  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

- (sulfated; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (thistle; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (vegetable, hydrogenated; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (walnut; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (whale; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (wheat germ; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT 29777-99-9D, coco derivs., quaternized  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (betaine; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT 56-86-0D, Glutamic acid, N-acyl derivs. 57-10-3, Hexadecanoic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 60-33-3, Linoleic acid, biological studies 107-35-7D, Taurine, N-alkyl derivs. 107-36-8D, Isethionic acid, esters 107-43-7D, Betaine, coco amido Pr derivs. 112-38-9, 10-Undecenoic acid 112-79-8, Elaidic acid 112-80-1, 9-Octadecenoic acid (Z)-, biological studies 112-85-6, Behenic acid 112-86-7, Erucic acid 143-07-7, Lauric acid, biological studies 334-48-5, Decanoic acid 373-49-9, Palmitoleic acid 463-40-1 506-30-9, Arachidic acid 506-33-2, Brassidic acid 544-63-8, Myristic acid, biological studies 557-59-5, Lignoceric acid 683-10-3 693-33-4 1323-38-2, Glycerin monoricinoleate 2281-11-0 3546-96-1, Sodium 3-dodecylaminopropionate 5138-18-1D, Sulfosuccinic acid, esters 7425-12-9 7664-38-2D, Phosphoric acid, esters, biological studies 7664-93-9D, Sulfuric acid, alkyl esters, biological studies 9004-84-6, Trideceth sulfate 10471-50-8 13177-41-8 24170-14-7 34870-92-3D, Polyethylene glycol sulfate, alkyl derivs. 52562-22-8 52665-42-6 123875-62-7 180968-46-1 203796-69-4 203796-70-7 203796-71-8 203796-72-9 203796-73-0 203796-74-1 203796-75-2  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE
- (1) Anon; PATENT ABSTRACTS OF JAPAN 1983, V007(259), PC-195
  - (2) Anon; PATENT ABSTRACTS OF JAPAN 1987, V011(394), PC-465
  - (3) Anon; PATENT ABSTRACTS OF JAPAN 1989, V013(417), PC-636
  - (4) Colgate Palmolive Co; WO 9517163 A 1995 CAPLUS
  - (5) Du; WO 9321293 A 1993 CAPLUS
  - (6) Erickson, F; US 5023312 A 1991 CAPLUS
  - (7) Henkel Kga; EP 0111895 A 1984 CAPLUS
  - (8) Imperante, J; US 5382381 A 1995 CAPLUS

- (9) Kawaken Fine Chem Co Ltd; JP 62153208 A 1987 CAPLUS  
 (10) Nitsukou Chemicals Kk; JP 58144311 A 1983 CAPLUS  
 (11) Oreal; EP 0145607 A 1985 CAPLUS  
 (12) Oreal; EP 0628305 A 1994 CAPLUS  
 (13) Procter & Gamble; WO 9632092 A 1996 CAPLUS  
 (14) Richardson Vicks Inc; EP 0328355 A 1989 CAPLUS  
 (15) Rocher Yves Biolog Vegetale; EP 0643960 A 1995 CAPLUS  
 (16) Sederma Sa; FR 2676645 A 1992 CAPLUS  
 (17) Tsumura & Co; JP 01153623 A 1989

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Full Citing  
Text References

AN 1962:405447 CAPLUS

DN 57:5447

OREF 57:1181d-e

TI Water-base drilling muds

IN Rosenberg, Milton

PA Gulf Research & Development Co.

SO 5 pp.

DT Patent

LA Unavailable

CC 52 (Petroleum and Petroleum Derivatives)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3027324		19620327	US	19581230

AB An improved H2O-base drilling mud having lubricating properties is obtained by adding 0.5-2% by vol. of a sulfurized unsatd, fatty acid and its esters of >8 C atoms, a sulfurized rosin acid, a sulfurized fatty alc. of >11 C atoms, or a sulfurized and unsatd, fatty acid pitch to the base material. For example, the load-carrying capacities (Timken Lubricant Tester) of 6% bentonite-H2O suspensions contg. 0.5, 1.0, and 2.0% by vol. sulfurized tall oil (2.5% S) are >40, >100, and >100 lb., resp.

IT Pitch

(as stabilizer for ethylene polymers or propene polymers, sulfurized, as lubricant in drilling fluids)

IT Drilling fluids or Drilling muds

(lubricants in water-base, sulfurized unsatd. alcs., esters and fatty acids as)

IT Fatty acids

(pitch, sulfurized, as lubricant in drilling fluids)

IT Fatty acids

(sulfated and sulfonated, as lubricants in drilling fluids)

IT Alcohols

(sulfur-contg., as lubricants in drilling fluids)

IT Lubricants

(sulfurized unsatd. alcs., esters and fatty acids as, in drilling fluids)

IT Esters

(sulfurized unsatd., as lubricants in drilling fluids)

IT Glycerides

(sulfurized, as lubricants in drilling fluids)

IT Resin acids or Rosin acids

(sulfurized, as lubricants in drilling fluids)

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